



Lili-Ann Wolff

Nature and Sustainability

An educational Study with Rousseau and Foucault

Contents

Preface	3
 PART I: SUSTAINABILITY AS AN EDUCATIONAL CHALLENGE	 7
 1 Introduction	 9
1.1 Whys, What Fors and Hows.....	11
1.2 Naming and Concepts	33
1.3 A Cross-Modern Study and a Stepwise Design	42
 2 Gaps and Scapegoat Jungles	 45
2.1 A Quest for Educational Efforts.....	45
2.2 Whodunits: The Search for Scapegoats	76
2.3 Conclusion.....	99
 PART II: BETWEEN THE PAST AND THE FUTURE	 103
 3 A Foucauldian Rousseau Study	 105
3.1 The How of Foucault	105
3.2 Research Outline of Chapters Four to Six	121
3.3 Conclusion.....	137
 4 Modern Discourses about Nature and Knowledge	 139
4.1 Methods and Theories	140
4.2 Towards Enlightenment, with Nature as Guideline	145
4.3 Reshaping the World.....	173
4.4 New Learning.....	192
4.4 Conclusion.....	201

5 Rousseau on Nature and Ethics	207
5.1 Background, Procedure and Sources.....	208
5.2 State of Nature and Human Nature	220
5.3 Human Relation to Self and Others	231
5.4 Being Social	241
5.5 Humans in the Natural World	247
5.6 Nature for Worship.....	251
5.7 Answers to the Inquiry	260
5.8 Conclusion.....	264
 6 Nature in Rousseau’s Educational Philosophy	 269
6.1 Background, Procedure and Sources.....	269
6.2 Creating the Natural Individual.....	280
6.3 Educating the Citizen	298
6.4 Education about the Natural World.....	307
6.5 Educating for Love of Nature as a Reflection of Divinity.....	312
6.6 Answers to the Inquiry	313
6.7 Conclusion.....	316
 PART III: BACK TO THE PRESENT	 321
 7 Rousseau, Foucault, and Contemporary Educational Challenges	 323
7.1 The Research Process and Findings.....	323
7.2 The Main Research Inquiry.....	328
7.3 Evaluation of the Research Approach.....	341
7.4 Final Conclusion	345
 Bibliography	 351

Preface

Ever since I was a child I have been fascinated by the natural world. My curiosity about nature resulted in a degree in science and soon after graduation I was occupied with environmental research and environmental protection issues, a route that led me to the field of education. In company with thousands of eager children and adults, I have been able to experience and discuss numerous aspects of the natural world but also to reflect on the options and the limits of human activities. I have met teachers, students, researchers, politicians and administrators from all over the world. My participation in Finnish, Nordic, as well as in the World Conservation Union's (IUCNs) educational committees and working groups have been especially valuable and have confronted me with many urgent environmental issues. The practice of teaching triggered me to explore the challenge of educational theory and to enter the field of research, and then the step was short to the philosophical arena. Thus, it happened that I came to settle down in this mixed field of interest that I soon will present. In this book I combine my theoretical and practical experiences of nature, education, and philosophy. As a matter of fact, my interest in the topic of this study has gradually grown out of personal experiences and knowledge both *of* and *in* nature, *of* and *through* education and *of* and *in* philosophical studies, discussions and reflections.

Before I start the story I will present the frameworks for my study and thank those who have contributed to it in one way or another. Through talented guidance, many possibilities for mutual reflections and full-time grants this work has gradually found its shape. The most important framework has been the *Doctoral School on Bildung, Learning and Late Modernity* at the Åbo Akademi University's Faculty of Education in Vaasa. Since 2005 I have been a member of this research forum that has offered very creative, supportive and responsive cooperation. This professional and ambitious research training has notably encouraged my research attempts and helped me to go on writing. Since the doctoral school group has consisted of people from various educational research fields, the group members have helped me to see the

environmental educational dilemmas from a broad angle and have triggered me to defend my thoughts concerning environmental issues profoundly. Our both formal and informal discussions about *Bildung*, diverse forms of modernism, intersubjectivity, recognition, collaboration, critical education, art, and many more issues have been very valuable to me and I have learnt much during our joint training. As a member of this doctoral school it has been possible for me to discuss my research not only with many interesting persons within the group, but also with invited international researchers representing other contexts and bringing in alternative and innovative philosophical and educational perspectives.

In addition to this general educational support, the membership in the research project *Environmental Education: Creating Sustainable futures* at University of Helsinki offered me topic related support. This group dealt with questions like environmental values, sustainability, active citizenship, participation, multiculturalism and various other aspects of environmental education. We have had possibilities to discuss our thoughts about basic concepts and matters many times, especially during our joint writing processes. In addition to the research group's own work, the research seminars in *Geography and Environmental Education* at University of Helsinki offered possibilities to reflect on matters connected to my research outlook and many others. The research seminars in *Environmental Education* at Åbo Akademi University in Vaasa especially challenged my own topical reflection, while the research seminars in *Philosophy* at Åbo Akademi in Turku have enlarged my philosophical perceptive during the last semesters of my doctoral research.

There are many of persons that I owe thanks. Firstly I want to thank my first supervisor, Professor Michael Uljens, for all the hours spent on reading my manuscripts, and tolerantly discussing my research dilemmas, and for steadily offering support and inspiration to push me further. I also want to thank my second supervisor, Professor Sirpa Tani, for trying to see the point in all my optimistic new ideas and for meeting them with uplifting encouragement. In addition to the supervisors, I wish to thank the pre-reviewers Professor Tapio Puolimatka and Professor Bob Jickling for constructively commenting on my manuscript, and Professor Bob Jickling also for honoring me by traveling all the way from Canada in order to be the opponent of my thesis. I also want to thank Docent Irmeli Palmberg, and Docent Hannele Cantell for reading and carefully examining my work. Likewise I owe thanks to Professor Olli Lagerspetz for commenting my interpretation of

Descartes and Rousseau, to Professor Colin Heywood for supporting my reading of *Émile*, and to Professor Thomas Regelski for both patiently and carefully helping me with the English language and for triggering my thoughts.

I have enjoyed many interesting discussions with many faculty associates and research students at Åbo Akademi, both in Vaasa and Turku and at the University of Helsinki. In the doctoral school I have received intellectual support and friendship from my colleagues Calle Carling, Sara Frontini, Juha Hartvik, Christian Lindedahl, Rita Nordström-Lytz, Doctor Hanna Kaihovirta-Rosvik and Doctor Birgit Schaffar. Last but not least, I owe gratitude to Inger Österlund for being my research-sister in sun, snow and rain, on foot, boats and train from the very beginning of this educational journey. Furthermore, I am thankful to Elsbeth Träskelin for constant practical aid and friendship. Among the researcher friends and colleagues in Helsinki I especially want to thank Doctor Sanna Koskinen, Doctor Margarita Gerouki, Hanna Nordström, and Anna-Leena Riitaola. I also hope all not mentioned by name, but who have been there for me in my research concerns and earn thanks for sharing both troubles and joy, will honestly feel you are remembered, not on the least all my friends and research colleagues from Strandgatan 8 in Vaasa. During my years of research I have also met colleagues in conferences, seminars, the EUDORA Consortium's BIP summer school in Jurmala, Latvia and other cooperative activities that have helped me to formulate and develop my thoughts. During the work on this book, I have been offered several possibilities to present parts of my study in compilation works, and beside many persons already mentioned, I also want to thank Docent Taina Kaivola and Professor Ossi V. Lindqvist for their valuable collaboration. So, thank you to all research mentors and partners for many fine theoretical discussions.

The doctoral school membership at Åbo Akademi University provided a fulltime scholarship for four years. The following foundations and financing agencies have also supported the research: Svenska kulturfonden, Svenska litteratursällskapet i Finland (Ingrid, Margit och Henrik Höijers donationsfond), Maj & Tor Nessling's Foundation, Oskar Öflunds stiftelse, Waldemar von Frenkells stiftelse, and Svensk-Österbottniska samfundet. Thanks to Åbo Akademi's rector's grant it was possible for me to participate in the American Educational Research Associations' (AERA) annual meeting in San Francisco in 2006. The City of Espoo's scholarship purse called "stipendikukkaro" paid many concrete research costs, and through the help of Gösta Branders forskningsfond I was granted research literature. I am enormously

thankful to all parties that have believed in me and made this research economically possible!

My family members are my steady companions and supporters. They have helped me to not get totally stuck in research these last years but also enjoy other dimensions of life. This work has thus not hindered me from participating in all kinds of family events throughout Europe. Without my beloved husband, my four amazing children, and my two lovely granddaughters, born during the time of my research process, this contribution to educational research should not have become what it is now. Therefore, I want to thank you Erik for your daily love and the steady support of your wife, my children Lisa, Simon, Artur and Joel and their partners, and my granddaughters Liv and Elinne for sharing many joyful and relaxing moments with me. I am also grateful for the time I have spent with many other close persons. Therefore, I want to thank all friends and relatives not mentioned for just being there and bringing me back to earth during these inventive and also intensive years when I have been occupied with reading, writing or theoretical reflections in the most odd situations.

My research has frequently taken place outside in the garden, on the seashore, in the forest, or wherever nature's voice has called me. I have worked out many parts of this book sitting close to my four footed family member Elvira, our cat who passed by during this work and left a void behind her. In conclusion, I am very grateful to all kinds of creatures that in one way or another have inspired, encouraged, supported and sponsored my research or me personally during more than a half decade and thus made my doctoral thesis achievable for a greater public.

Vaasa, December 15, 2010

Lili-Ann Wolff

Part I

Sustainability as an Educational Challenge

1 Introduction

A US funeral business that specializes in launching cremated human remains into Earth's orbit has begun taking reservations for landing small capsules of ashes on the moon.... The company hopes to install a cemetery on the lunar surface to hold cremated remains of the dead, or a smaller symbolic portion of them, which one day could be visited by relatives of the deceased.... For sending a tiny, one gram portion of cremated remains to the moon, the company charges 9,995 dollars ... Other funeral services besides the full lunar trip include sending ash into Earth's orbit -- the cheapest option, starting at 700 dollars -- and all the way up to launching remains far, far away into deep space, for which the company charges more than 37,000 dollars. (Staff writers, Moon Daily, November 14, 2008)

In the middle of November 2008, numerous newsletters and websites announced news about future graveyards on the moon. This news awakens many thoughts about the inventiveness and abilities of humans to extend their temporal and spatial spaces. Given these tendencies, eager scientists have made it possible for ordinary humans to expand their territory from the earth to another celestial body. Even if this sounds fascinating, the news can be read as both good and bad. Maybe the whole idea is only a curiosity, but the prospect can nevertheless both convey desperation and carry hope. As desperation, this news simply describes the hypermodern humans' view of themselves as superior creatures but as having no safe future as a species on the earth. As hope, the story may be a sign that humanity has reached a moment when it is technologically capable of breaking the limits of nature and making the dream of a heavenly afterlife come true. Alternatively, this project is purely a manipulative and commercial gimmick aiming at profit. In any case, for those who accept this offer, the old phrase "from dust to dust" loses its initial meaning, as this sky project definitely will prevent the corpse from returning to the circulation of earthly elements. This business announcement happens at a time when more and more people and agencies worry about climate changes that already increasingly threaten the life in numerous places on the earth. Another way out from all the earthly troubles might be better than burying humans on the moon: to transfer human beings to outer space when they are still alive. Science fiction authors and scientists have discussed such options. Yet, whether the transfer happens in life or death, such extra-terrestrial opportunities will

most certainly be available for only a minority of the humankind in the near future, especially at a time when the world faces an extensive economical crisis.

All of us will probably have to go on living as we hitherto have done, dependent on earthly circumstances. Humans have always lived *as, in* and *of* earthly nature; the forces of nature have acted both inside and outside the human skin in a constant process of interaction; and, after death, the body has returned to earthly elements. Humans' relation to their internal nature as well as to external nature has hence been intricate, and the way they have treated nature has caused problems over hundreds, even thousands, of years. However, only recently in human history has a marginal group of people regarded this as a worldwide problem and requested radical changes of human behavior in relation to the natural world. Undeniably, human life is now changing more than ever. In addition to major problems of population growth, global warming, depletion of the ozone layer, pollution of air and water, and biodiversity loss, most of humanity's activities and undertakings have had negative impact on the natural world. Inequality and unjust distribution of resources threaten personal security and make life for most people a tremendous struggle. Moreover, humans these days have not only started to abandon their attachment to earthly nature and thus give up their species' native habitat, they have simultaneously started to compromise their innermost genetic distinctness and mix human genes with those of other species in nanotechnology-based research, thus altering human nature.

Overall, humankind's hazardous lifestyle presents major challenges for education. As humanity has always been a part of and dependent on nature, its relation to nature is an issue that has been present in education and addressed one way or another by many school subjects and university disciplines over the ages. The aim of understanding the role of humans in nature as a responsible one, living *for* nature (maintaining its wellbeing) not just *in* it, is thus a project of a more recent date. But it appears that this project is once again fading away in favor of other more "human" undertakings, thus ignoring the interrelation of nature and culture.

This chapter continues with a clarification of why I have pursued this research and describes the choice of method, presents important characters, and states my theoretical point of departure. A second main issue involves an interpretation of some central concepts and a discussion of how I will use them in this study. Finally, the chapter ends with a brief content outline for the rest of the book, an ending that will briefly depict the complete research approach stage by stage.

1.1 Whys, What Fors and Hows

In the last decades, an increasing number of researchers in many research fields have sought answers about why humans have treated nature as they have, and how to enhance the protection of nature and promote a more sustainable living. Research in philosophy, history, anthropology, religion, sociology, psychology, economics, ecology, geography and many other disciplines have all studied problems in connection to humanity's relation to nature. Researchers have suggested solutions to the very complex and challenging dilemmas concerning how humans relate to other creatures and the earthly habitats they share with them. Many of these solutions have required education. The concepts of *environmental education* (EE) and *education for sustainable development* (ESD) have both attracted increasing attention in education, even though they do not quite mean the same thing. In particular, the field of environmental education has proposed different methods for teaching people to live on the earth more gently. For its part, environmental education has progressively been accompanied by the concept of education for sustainable development as a solution to the common quest for a more sustainable life on earth that emphasizes the need for present generations to assure appropriate living conditions for future generations. The differences between the concepts will be explained in *Chapter Two*,¹ but for present purposes it is important to note the relatively recent attention given by educators to the impact of humans on their natural environment and the need to protect that environment for the future.

Despite attempts at educational solutions, humans continue to use nature in non-sustainable ways. No adequate methods available for teaching about environmental issues have promoted pledges of sustainability, and no one has come up with any brilliant clue of how education or other institutions or influences could contribute to a larger and more profound environmental commitment that could significantly change the treatment of our natural world. While environmental education is a new teaching field, the research that theorizes and discusses the teaching practices in this field is also young and has a tradition of less than 40 years; education for sustainable development is even a younger focus. From the beginning, the most common approaches to environmental educational research have been empirical studies concerning effective means of promoting a more environmentally gentle living.

¹ Readers are asked consult 2.1 already if they are not familiar with these concepts.

Environmental protection became a common concern as awareness of the environment increased in the 1950s and 1960s along with calls for action; as a result, the protection of nature came to be seen as a duty. This new awareness did not arise out of nothing. Awareness of environmental questions and concern for nature already existed in the 19th century; in some form, it already existed long before that. But such awareness did not become a pressing concern until the last half of the 20th century. The demand for the educational study of environmental topics (and not only as a part of science or biology, but across all subjects) has only become urgent since the beginning of the 1970s when the concept of environmental education gained a foothold, first in environmental protection circles and assemblies, and also gradually in typical educational contexts.

Since the 1990s, more and more representatives of environmental education have called attention to the need for a more critical view (e.g., Breiting, 2009; Saul, 2000; Tilbury, 2002) and for philosophical approaches to environmental education (e.g., Jickling, 2001, 2009; Orr, 2004; Sauvé, 1999). Recently, voices have summoned environmental educational research to emerge from isolation and expand to a wider cultural and social relevance, following the same trend in other forms of educational research (e.g., Lotz-Sisitka, 2009; Scott, 2009). There have been forceful arguments both for approaches that are more theoretical and for more multidisciplinary approaches to environmental education. I subscribe to these opinions, and I believe there is especially a striking lack of historical and philosophical views, a serious lack that Carr (2003) also notes concerning educational research in general. He describes the condition as one of “fragmentation” (ibid., p.16). Most history investigations of environmental education do not go further back than to the 1950s, if that far. Moreover, critical and philosophical perspectives have hitherto been rare in environmental education.

Focus and Inquiry

This research study sets out from the premise that in most cases education has not managed in tackling the environmental problems adequately. In this critique, I do not blame anybody and, if I did, I should be as blameworthy as anybody else as I have worked in the field of environmental education for many years. Instead of blaming, I prefer to stress that, despite some effective environmental educational achievements

around the world, all contributors need to be self-critical; steadily aware of which theoretical directions they apply, and ready to discuss various options on a long time basis. Despite many good attempts, there are still many gaps and tensions between our knowledge about how best to treat nature and the willingness to act in such ways for the present and the future. Many well-considered steps need to be taken before awareness leads to concrete actions; and on the road from knowledge to concrete actions, individuals and societies both have to consider a host of value-laden issues that are in need of ethical scrutiny. However, ethical considerations are not the same thing as instructing others to adapt a given ethical behavior. From the very beginning, both environmental education and education for sustainable development have focused on the need to change attitudes towards nature and the environment. Discussions are, therefore, extremely crucial about what it means to purposefully change somebody's attitudes and under which circumstances such undertakings are defensible. In the last ten years, an increasing number of researchers have rejected the quest for changed attitudes and instead recommend more emphasis on, and discussions about, what ethics² entail in the context of environmental education. Many remarkable persons have already tried to solve the ethical problem of humanity's relation to nature, both through the models of their own lives and on a theoretical plane. "Environmental ethics" is a discipline in philosophy that increasingly discusses these issues. The understanding of environmental ethics has thus also increased, but philosophy of education has rarely discussed environmental ethics.

With various requests and calls for alternative environmental educational research methods in mind, I found that my research might be most beneficial if it would bring certain critical perspectives from philosophy and history to bear on problems of environmental education and the sustainability dilemma. I have thus decided to contribute to the discourse about environmental education by focusing especially on the ethical dimensions of education from a multi-disciplinary perspective that comprises a blend of education, philosophy, and history. Central considerations in this book are, then, the contradictions between, on the one hand, humans as biological

² 'Ethics'(from the Greek word *ēthos*, custom, disposition) is the branch of philosophy that deals with questions related to 'morality' that in turn relates to codes of conduct. Ethics is an ambiguous concept; there are many philosophical schools with different ethical views, and my aim is not to distinguish them systematically. At this stage, I simply use 'ethics' to denote 'the moral principles governing or influencing human conduct'. Later in this chapter, I will launch into a few basic ethical problems and in the next chapter I will present a few basic ethical theories as a background to the following chapters that mainly will describe ethics according to the philosophies of Rousseau and Foucault.

creatures born as part of nature and simultaneously into social-cultural communities and, on the other hand, how humans create self-understanding and view themselves in relation to fellow creatures, to the rest of nature, and to society. While education that deals with problems very strongly related to ethics³ eventually will reveal contradictions both within particular individuals and among individuals, as well as conflicts at the societal level and on a global scale, important issues will be ethical conflicts and power formations. Thus, my main interest is to discuss how education can deal with conflicts that arise from humans' divided role as both natural and social beings, a division that affects the complexity of their relations within themselves, to each other and to the entire world. The main research question is twofold and focuses, firstly, on ethics and, secondly, on education and asks:

- a) What ethical dimensions are challenged by the enigma of sustainability?
- b) What kind of education do these dimensions require?

To answer this twofold question I have divided my study into three parts. Part One attempts (1) to identify the topic of the book and study how education has dealt with nature and sustainability hitherto, and (2) to identify typical answers about why humankind has caused so many environmental problems. However, because this starting point showed that humans' relation to nature was an old and manifold ethical dilemma, my curiosity for historical answers was triggered and, therefore, I decided to delve more deeply into history in Part Two, concentrating on how humans have dealt ethically and educationally with their relation to nature in the Western tradition.

To avoid undertaking a task that is too broad, I chose to focus on a particular era, the modern era,⁴ a philosophical movement that has had a great impact on human development not only in the Western regions but in most parts of the world all since

³ All education actually relates to ethics in one way or another.

⁴ The terms "modern," "modernism" and "modernity" are widely disputed, and 'modern philosophy' is often separated from the later 'modernism' movement in Western art and literature (Silverman, 1996/2006). When I use the word 'modern,' I mean a philosophical movement that emerged gradually already during the Renaissance as an alternative to the ancient philosophy and accelerated rapidly during the Enlightenment. The expressions "enlightenment" and "modern" can also be seen as states of minds that are not strictly limited to special time epochs (e.g., Kant talked about "enlightenment" and Foucault about "modern" as ways of relating to the world).

the Enlightenment,⁵ and a particular representative of that pivotal age, *Jean-Jacques Rousseau*. In this second part of the study, I chose to employ *Michel Foucault's* historical research methods. However, this choice brought him in as a speaker with his own voice. Progressively, then, a discussion between three voices unfolded: me, Rousseau, and Foucault. Part Two is the result of that discussion and it tries to consider various angles of a tricky and never-ending topic starting from human nature and ending with education. This second approach includes three studies that ask: (I) *What discourses about nature, knowledge and education inspired Rousseau?*; (II) *What were Rousseau's ethics in relation to nature?*; and (III) *What is the role of nature in Rousseau's educational philosophy?* Part Three concludes and brings these three studies together in a present day reflection. Thus, the entire research approach starts and ends with contemporary educational challenges.

Turning towards History

Why focus on the past? The answer is that we can neither solve the problems of today nor of tomorrow without an understanding of their historical background. When trying to understand the challenges that education has to face today and in the future because of a non-sustainable human lifestyle, we can gain from viewing the past and learning from earlier experiences. Environmental education is a young phenomenon that arose when it first became obvious that humans had selfishly destroyed and diminished the living conditions of the other creatures of the earth, and when it became apparent that the human impact on other humans had reached negative proportions. Environmental education arose as an important promoter of change in the 1970s and 1980s when the human impact on nature rapidly increased and the resulting environmental problems became unmistakably global, unscrupulously crossing political boundaries. Eager environmentalists were the first to take a stake in environmental education. Given this source, the environmental educational research field jumped right into the field of education through a side-door, eager to achieve

⁵ The length of the Enlightenment is interpreted in various ways, mostly starting in the end of the 17th century (e.g., Schmidt, 2006) or beginning of the 18th and ending about the time for the American Declaration of Independence in 1776 or the French Revolution in 1778 (Dictionary of the Histories of Ideas; Sörlin, 2004). My distinction for the Age of Enlightenment coincides well with Foucault's 'classical era' that takes place from 1660-1800 (Best & Kellner, 1991). So, when I use the word Enlightenment with capital letter it connotes a limited epoch, starting at the end of the 17th century and covering the entire 18th century; when I use the word with small letters it denotes an unrestricted progress culminating in the 18th century.

rapid changes. However, this extraordinary start overlooked a long tradition of educational philosophy that had wrestled with similar ethical issues facing environmental education. Originality is not necessarily detrimental to progress, but ignorance can easily lead things astray. I will argue that the numerous attempts to solve environmental problems and to reach sustainability by behavior modification have been a failure that could have been avoided if environmental education had been better anchored in, or at least made better use of, educational theory from the very beginning. With the help of history, I want to identify some basic philosophical problems that make it so challenging to try to steer human life in the direction of greater sustainability of the environment and into more just social practices. My attempt is to re-introduce some old ethical fundamentals from educational theory and to apply them to environmental education. Conversely, I will also juxtapose historical and philosophical issues with current environmental problems hoping to contribute new perspectives to educational research in general. If environmental education has overlooked the philosophy of education, education in general has both theoretically and practically likewise overlooked that humans are a part of nature, not just in it or in control of it.

My research training has been within the field of theoretical education; so called *allmän pedagogik*,⁶ a field that studies education from multiple viewpoints. My background and special interests are also multifaceted and include, on the one hand, education and philosophy, on the other hand, bio- and geosciences. Therefore, I have neither the ambition nor capacity for performing a customary one-discipline investigation. Instead, I want to combine my package of theories and experiences into a multifaceted but focused study.

A historical research perspective is a conversation with the past that can expose deep-rooted cultural biases and expose why we are who we are. But it is also a way of uncovering forgotten truths. It is a way of making the rapidly changing world more understandable. A dialogue with history is, in this case, an opportunity to obtain a more profound understanding of the ethical obstacles behind humankind's complicated relation to nature, obstacles that delay all radical change processes. History can also protect us from historicism; that is, from trying to generalize the past and rashly applying former solutions to present dilemmas (see Foucault, 1984).

⁶ The research area that in my Finno-Swedish context is called *allmän pedagogik* is, like the German *Allgemeine Pädagogik*, a discipline that focuses on educational conditions and learning theories from philosophical, but also historical, sociological, psychological, and political perspectives. The English concept that comes most close to *allmän pedagogik* is philosophy of education.

Humankind cannot jump off the train and run backwards. Nevertheless, history can influence the choice of direction, and historical awareness can protect against repeating earlier mistakes.

But, why did I decide to start with the Enlightenment? Are not the Enlightenment and the modern era passé as archetype epochs? Yes, they are. The problems are different now than during the modern era, but some profound phenomena have obviously more or less evidently survived or even returned in a new shape in the present epoch that some call *late modern* and others (who want to stress that our time diverges from the modern) *postmodern* and even *high modern*.⁷ Education was the great Enlightenment project, a kind of “savoir of the world.” This project has gained strong winds again. The tensions between *rationality* and *desire* as well as rationality and *emotions* that were discourse issues in the 17th and 18th century, have come into view again. Today, as then, a protest is rising against a too strictly rational and utilitarian⁸ view of reality (e.g., P. H. Ray, 1996; Ray & Anderson, 2001; O’Sullivan, 1999). Likewise, contemporary critiques of consumerism and the selfish satisfying of present desires instead of sacrificing to protect the needs of future generations and for a more sustainable development all resemble 18th century critiques of increased consumption and of luxurious lifestyles. There is also a similarity between the Enlightenment and the present when it comes to pleas for global equality and more interest in discussing issues like cosmopolitanism versus nationalism.⁹ There are also many unmistakable differences between our time and the 18th century. While the strength of nation states increased in the 18th century, at present the role of these states has decreased rapidly in favor of global interests. New thoughts emerging from deep ecology, alternative philosophies, postclassical sciences, feminism, and “deconstructive education”¹⁰ indicates that a new worldview might emerge; a view that could guide twenty-first century citizens to a more sustainable way of life. The modern framework that legitimated the industrial revolution with its side effects of resource reduction and pollution could thus soon lose its usefulness.

⁷ The concepts of *postmodern* and *late modern* are especially much in use in social science discourses (see, e.g., Bauman, 2000; Beck, 1992, 2006; Giddens, 1991; Wolff, 2008).

⁸ See more about utilitarianism in Chapter Two.

⁹ David Hume, Adam Smith, and many other philosophers, statesmen and scientists in diverse European countries and colonies shared cosmopolitan views that ranged above and beyond national contexts. These so-called “Men of letters” belonged to a limited group of educated people that circulated letters (“The Republic of Letters”) that built a kind of conceptual space defined in terms of ‘cosmopolitanism’ and ‘universality’ (e.g., Withers, 2008).

¹⁰ In school contexts, promoters of “deconstructive education” aim at a complete reorganization of the schooling.

However, there are also many other strong winds blowing in the opposite direction than people led by unconventional visions predict. Furthermore, strong forces are keenly pushing towards endless economic growth, regardless of the fact that the resulting global economic imbalance is enormous. The present condition seems critical, then, and recently many voices have talked about “the ecological crisis” in past, present, and future terms (e.g., Sargent, 1968; White, 1967; von Wright, 1986). This ecological crisis has turned to a moral problem; yet optimists predict that it will lead to a rising tide of ethical change across the globe (see, e.g., Edwards, 2005; Fry, 1994; Singer, 2003)—a prediction reminiscent of the progress many dreamt about in the 18th century, dreams that ended in political revolutions. The change expected by optimists for the near future is envisaged as even more sweeping than the Enlightenment; as a total rethinking of the human role in the natural world (Orr, 2005) and as more revolutionary than the Industrial Revolution (Edwards, 2005).

The advocates of sustainable development argue for changes and actions towards a better future. Although pragmatic, the idea of sustainable development shares a likeness with perhaps the most characteristic brainchild of the Enlightenment, the prediction that “reason” would promote a future characterized by ever-unfolding “progress.” The dreams of sustainable development and of continuous progress are both wed to the much older belief in *perfectibility*¹¹ and of ongoing elevation of the ethical conduct of humankind. People often have had such visions of an overall improvement of human life on earth, a kind of forgetting of the past and hoping for something better to come. These visions have created utopias of many kinds. Nonetheless, at the same time people have felt desperate and have lacked clear images of the future. They have thus felt trapped in the present, searching for new ways forward. Education has always been central to that search, a kind of a key to the exit gate. Education was thus a key theme of social dialogue during the Enlightenment and is still featured in current debates about the best ways of attaining more sustainable bases for human life. Education has become the catalyst and foundation of attempts at sustainability (Edwards, 2005). Questions about whether existing educational practices provide the knowledge one needs for sustaining life is just as appropriate as it was 250 years ago. However, in this study I do not intend to draw direct parallels between the Enlightenment and our current situation. My

¹¹ I will further discuss the concept of “perfectibility” in Chapter Two.

intention is also not to turn back the clock of history and present some great but forgotten truth. Instead, I want to stimulate reflections and discussions about the complexity and misguided nature of the questions asked about nature, education, and sustainability today by analyzing an old issue in a new perspective and by presenting a relatively new theme through the lens of an old viewpoint. This historical approach seeks to provide a detailed look at how humans have regarded and thus dealt with their relations to nature during a particular era, especially in connection with the growth of the knowledge base and with how education has dealt with the resulting explosion of knowledge.

Historical research has shifted towards the end of the 20th century because of the postmodern critique. Influences from other research fields and disciplines have started to challenge historical research (e.g., Kalela, 2000). Interdisciplinary and critical approaches have revealed new historical perspectives. In the early 20th century, the members of the “Frankfurt School” introduced critical views of history and many after them have also produced critical inquiry. The philosophers of the Frankfurt School focused their criticism on all kinds of social conditions, from institutions, to ideological topics, such as democracy, freedom, enlightenment and human rights (see, e.g., Horkheimer, 1972; Adorno, 1955/1987). Max Horkheimer and Theodor Adorno attacked the Enlightenment in their famous *Dialectic of Enlightenment* (1972) and blamed it for being a myth in itself, although the strong belief in scientific knowledge during the Enlightenment era was intended to counter other myths. The social critique employed by the Frankfurt School, so called “Critical Theory,” aimed not only at creating theories, it strived to ‘change the world’, as Marx defined the task of philosophy in one of his early writings (Marx, 1995).

A Foucauldian Approach

In this book, I take on the challenge of applying philosophy to our historical understanding of educational thinking about the environment, while remaining aware of the growth of the natural as well as social sciences and the resulting knowledge about the world that cannot be neglected. To stay critical, but not wed to Critical Theory, I decided to implement Foucault’s methods. He partly agreed and partly disagreed with Critical Theory and developed his own critical views and methods.¹²

¹² Foucault actually developed his theories simultaneously with Critical Theory unaware of the works of the

“[P]hilosophy is that which calls into question domination of every level and in every form in which it exists, whether political, economic, sexual, institutional, or what have you” (Foucault, 1997e, pp 300-301). Foucault labeled his research “history of thought¹³” (Foucault, 1997c, p. 117) and described his undertakings as a rediscovery of “problems” or “problematizations” (ibid., pp. 117-118). Through the practice of problematization, the researcher discovers how diverse practices have become problems and what kind of solutions they have offered. While Immanuel Kant searched for the limits of human understanding in his critical philosophy, Foucault shaped a critique “that takes the form of possible crossing-over [franchissement]” (Foucault, 1997h, p. 315). History, then, is a study of “the events that have led us to constitute ourselves and to recognize ourselves as subjects of what we are doing, thinking, saying” (ibid.). Viewing history, this way is not a matter of searching for universal truths but of promoting possible changes and thus the practices of freedom.

Gradually, Foucault came to emphasize philosophy as a “critical ontology of ourselves” (Foucault, 1997h, p. 319) in which one investigates the contemporary ways of acting and facing reality in the light of one’s historical background. These “historico-critical investigations” are *practical*, because the point of departure is actual human existence. They are *specific*, since they focus on a particular material (e.g., a special practice or discourse) and they are *general*, while they deal with questions of relevance in our present societies (Olssen, 2006). Even though his aim not was metaphysical, Foucault (1997h) wanted to encourage a critical process that breaks and then strives to surpass the limits imposed on individuals in order to establish a new way of being in the world, a new *ethos*. According to Foucault, there was nothing original with his methods. He used textual references, cited authorities, drew connections between texts and facts, suggested, and offered explanations, just like other historians. Yet, with his stories, Foucault wanted to initiate transformation of his own and his readers’ experience of themselves as participants in their own moment in time, their current mode of modernity, and of what is offered as the ‘truth’ and ‘right knowledge’ at a given moment and in a given space. Foucault’s history writing intended to promote a different relationship with the issue under study, with its present status as well as its historical roots. Furthermore, the experience he offered

Frankfurt School philosophers, since they were not known in France at the time when Foucault started to write his books (see, e.g., Foucault, 2000b).

¹³ Another label was “history of the present” (Foucault, 1977, p. 31), which meant writing “a history about the past in the terms of the present” (ibid.). The primary interest was not the past, but contemporary problems.

his readers had to relate to a collective practice. His research aimed at offering experiences in form of fictive images unbound from what is true or false (Foucault, 2000b). The precondition of such a study is that it has to be open-ended. Its purpose is not to expose “the truth,” as was the claim made by Enlightenment *philosophes*,¹⁴ but to evoke an experience for both the writer and the reader (Foucault, 2000b). History has built up our present way of facing the world, but history is different from the present—and hence offers a distanced perspective (Oksala, 2005). Such distance is especially useful when the focus of research is the use and abuse of power. Foucault (e.g., 1986a, 2000g) sensed the necessity of studying instances where forms of power meet resistance; this identifies diverse forms of power that have otherwise gone unnoticed and helps elucidate how they interact, how they are wielded and to what (or whose) benefits they accrue.

Writing a book was primarily a critical experiment for Foucault, and his aim was not to tell “the truth” or explain any state of affairs. Instead, he wanted to raise complex questions, show issues in new relations, and introduce alternative views to taken for granted perspectives. Research that is in line with Foucault’s historical approach strives to explain events in a most honest way without ignoring off-stage, behind the scene variables that have otherwise gone unmarked when history recounts only what happens on the historical stage. This kind of research also aims at making researchers aware of their own biases and limitations. The task of the kind of critical research inspired by Foucault is, therefore, not to judge the present or to guide the flock. Instead, the task is to introduce alternative answers to current complexities while acknowledging the past (see also Simons, Masschelein & Quaghebeur, 2005). Historical research, performed in accordance with Foucault, does not show how the past has lead inexorably to the present; rather, it illustrates that the present is no less strange than the past (Kendall & Wickham, 1999). Foucault wanted the reader and the researcher to collaborate in a transformative process that raises doubt and considers things from completely new perspectives and, thus, that is capable of changing and therefore even changes their previous standpoints. In this research, I will show how the series of the historical events fall together for *me*, not make claims about how things actually were, are, or have to be. The aim is mainly to raise curiosity and encourage discussions.

¹⁴ The word “philosophe” will be interpreted in the end of Chapter Two.

Rousseau as the Hourglass Waist

Beside Foucault, another focus in this study is on the writings of a leading Enlightenment thinker, Rousseau. Choosing one main person to represent the entire modern Western tradition in illuminating the topic at hand was an easy task. Rousseau's reputation is unquestioned in Western history, regardless if the topic is education, philosophy, nature, environment, anthropology, psychology, politics, or society. He is a given name in the environmental debates of today. A team of thirty-five experts classified him as one of the "very obvious 'great names' in the environmental world", one among the forerunners in the volume *Fifty Key Thinkers on the Environment* (see Palmer, 2001, p. xiii-xiv). Few others have entered the discourses on nature, education, and modern human identities with such enthusiasm as did Rousseau, who dealt with these issues in most of his writings. He participated in discourses about what 'human nature' is and what it means to live in accordance with what is 'natural'. These questions caught his interest from ontological, political, and metaphysical perspectives. In addition, he concerned himself with methods for encouraging human potential and saw ethical criteria as the foundations of a decent society. He problematized many ideas of his epoch that are relevant in a sustainability debate. Even if he often stood apart from the mainstream of the Enlightenment by questioning many of its fundamentals, he also agreed with and encouraged certain others. He was, nevertheless, more a naysayer than a 'yes man', and almost his entire literary production as well as his own life was to a large degree an embodiment of resistance towards the behind-the-scenes uses of power that Foucault (1986a) has encouraged researchers to trace. Rousseau was a man who dared to think differently and argued frankly against what he regarded as corrupt. His radical view, one whose influence has largely faded as education has been influenced by industrial models, is worth revisiting in the contemporary context of today when environmental problems have attracted much new huge attention.

Rousseau's writings demonstrate that he was familiar with the history of Western ideas since Antiquity. He knew the traditions and infused them with his own as well as others' newborn ideas. While his writings have had a great influence, his thinking influenced the whole Counter-Enlightenment movement and his impact has been strong on Romantic and Post-Romantic philosophy and education. For example Immanuel Kant, Johann Gottfried von Herder, and Friedrich Hegel were all inspired by Rousseau

Many of Kant's main ideas were actually first expressed, however briefly, by Rousseau. As a quick answer on *why* I chose to rely on Rousseau, I can answer with Sörlin's words:

He is the hourglass waist in the European history of ideas.... Everything came together before him, but after him all things split into thousand small grains of sand. That is exactly the modern destiny; the split, the lack of overview and coherence, the impossibility in a system that tries to catch it all.¹⁵ (Sörlin, 2004, p. 371, Wolff's trans.)

Rousseau did not personify this hourglass waist alone, but he definitely stood at the zenith of the Enlightenment.¹⁶ His thoughts both brought together many pre-modern views and influenced various disciplines in many new directions. Since Rousseau expressed rebellious thoughts during an age of fermentation, his famous book *Émile* was both banned and praised. Rousseau inspired school reformers in many European countries and in America and Russia, and his political thoughts had an influence on many thinkers. The influence of Rousseau on the German *Bildung* tradition is unquestionable (see Benner, 2005; Tenorth, 1988), and he has also played a great role in the development of American (deGarmo 1907/2006) and Scandinavian education (Rinne, Kivirauma & Lehtinen, 2004) through his influence especially on Kant, Friedrich Herbart, and John Dewey.¹⁷ In addition to Plato's *Republic*, W. Carr (2003) notes Rousseau's *Émile* and Dewey's *Democracy and Education* as two canonical texts in the Western modern educational tradition that seriously discuss the importance of education in promoting a good society. While Western education until now has followed certain 'modern' traditions, it will be helpful to turn back to one of the formative sources of that tradition and explore what Rousseau actually said about human being, nature and education. Yet, he is also an outstanding example of how difficult it is to bring theory directly to bear on the living of life. In that, he serves as an example for any humans searching to manage their own life regardless of epoch.

The hourglass is a symbol for an intermediate position between the past and the future. It depicts human life as a struggle between three spaces: the past, the present,

¹⁵ ”Han är timglasets midja i Europas idéhistoria Mot honom förs allt samman, efter honom löper allt isär och bildar tusen små sandkorn. Det är just det som är det moderna ödet, splittringen, bristen på överblick och sammanhang, det omöjliga i ett system som fångar allt.”

¹⁶ Researchers still argue about whether Rousseau belonged to the Enlightenment or counter-Enlightenment (see, Delaney, 2006).

¹⁷ Dewey's *Schools of Tomorrow* leans a lot on Rousseau's educational ideas.

and the future, where the present moment is rushing by very quickly. My intention was to join Rousseau right at his space, in the middle of the modern hourglass, as a spokesperson for the past, concerning the future, and who nonetheless was intensely occupied with and emphasized the present. I wanted, on the one hand, to know what he had to say about nature and education, and on the other hand, to observe not only how his thoughts have influenced modern educational tradition until today but also what has been forgotten. From the very beginning, I had a strong presentiment of that his arguments might have something to offer contemporary education debates concerning sustainability and, after completing my investigation, I am not disappointed in this respect.

Choice of Vista

This study will focus on many gaps that complicate the educational process. Primarily, there is a big *gap*, or in fact many gaps, between solid knowledge and sound actions. Since Antiquity, it has been obvious that knowledge, even if combined with rational thinking, is not enough to foster virtuous actions. Various barriers widen and multiply these gaps and thus debilitate attempts at bridging them—in particular, the contradictory aim of sustainable development is a barrier between knowledge about the environmental problems and sound actions towards a less environmentally destructive future (see e.g., von Wright, 1993). It is difficult to reach equality and protect nature at the same time as we are racing towards ever more economic growth (ibid.). Therefore, matters that threaten the prospects of economic progress easily are readily rejected as irrelevant (Svendsen, 2004). One scenario shows that consumption ensures employment and development and leads to longer, more fulfilling lives. Another scenario shows that such out-of-control consumerism threatens the survival of the world. So, the views of economic expansion and the sustainability of the natural world are diametrically opposed. Thus, the quest for ever-greater consumption continues, even though there is no evidence that human life has improved overall (ibid.). Free trade capitalism and its progressive globalizing influences both rich and poor countries and make them rush to join the despoiling of the natural world in search of the growth of capital.

The gap between knowledge and action exists on both an individual and a social level. Educational discussions and theories, in particular educational debates and

research about the environment, have often dealt with the challenges of these gaps and have searched for successful methods for overcoming the obstacles that foil environmentally responsible actions. Ideally, the direction from knowledge to action is linear. Hypothetically, if knowledge is the beginning point, an input of particular educational elements automatically results in the expected outcome. There is, however, no straight route from knowledge to a desirable action because the obstacles are numerous between “right knowledge” and “proper action”. How the teacher can choose learning activities that lead the students from knowing to doing is, therefore, a basic educational quandary. Nevertheless, the dilemma can also be the result of ignorance: people act, but lack proper knowledge for their actions. While problems with the environment increase in number and complexity, ignorance is all too typical, both in daily life and in educational support for sustaining the environment (see Palmberg, 2008).

Beside such gaps, dynamic tensions between humans and their relation to nature produce even more problems. While ecology and the role of humans in that ecology are complicated enough to begin with, to these can be added tensions between different views of which or whose knowledge to rely on. Global warming is a good example of the kind of tension that can arise between different scientific perspectives—not to mention social, cultural and political ideologies that influence which or whose science will be accepted and acted on (or not). Thus other contradictions, quite aside from the scientific knowledge base, arise between individuals and social groups. Individuals can even be conflicted by their membership in different groups: for example, their workplace and its values and their personal values. Such components involve the opposite push-pull of emotional desires and rational desires. Emotional desires are innumerable and, typically, their conflict with rationality is often difficult to overcome (see Irvine, 2006). Rationality, the possibility of and longing to think objectively and logically by employing intellectual, reasonable, scientific knowledge, does not always harmonize with emotional desires. Even if rationality rules over emotional desire, it does not easily win (*ibid.*). Confronted with a choice, for example, individuals may prefer to follow their ‘wants’ and to do what pleases them from a personal view rather than act in accordance with what reason points to as the ‘needs’ of the environment as shared by all people. Selfish desires too often win the battle with the unselfish intentions. Yet, not all desires are necessarily selfish, and one’s own emotions and body do not

necessarily initiate what one chooses to do; in fact, other individuals and external matters easily influence one's choices (ibid.).

In the long term, individuals and communities may know what is 'just' and 'right' in relation to the natural world and for society; but their immediate desires can lead them to prefer to have a good life in the near future or even to attain satisfaction at the very moment. Acting rationally implies doing what is known or calculated to be the best of alternatives, and basing one's actions on unemotional and non-ideological grounds. To the contrary, blindly or easily following one's desires without rational behavior implies that one is a slave to those desires. Yet, even if such desires rise from emotions, emotions are not necessarily harmful. Trying to base one's actions merely on rationality without emotions has been diagnosed as one of the causes of the contemporary despoiling of the environment (see, e.g., Orr, 2003), and this view shows similarities with Rousseau's judgment of his own time. Neither purely rational desires nor purely emotionally led desires can result in equality and justice in human life, and that includes a more sustainable life for all creatures. Rationality without any emotional balance may lead to catastrophic choices that create certain sufferings on pursuit of a goal that only seems to be good from a rational perspective.

Although individuals who have knowledge and want to act on behalf of what they know should be best, they do not necessarily do so. Effective knowledge about the environmental issues and a desire to act are not enough for actions to result (see Cantell & Larna, 2006). The desire and the will to act do not proceed in a straight line because the will is steered by so many conflicting desires. Of all such pressures, the desire to obey social dictates—to avoid attention and act generally as others do—is very strong. Rousseau (e.g., 1st D) problematized this human tendency to follow the masses as to what one 'ought to do,' but Martin Heidegger (1927/1996) especially drew attention to this ethical problem. Humans prefer to act like a kind of neutral 'Everyman' (*das Man*) instead of to act in accordance with their own ethical and practical criteria (ibid.). Being 'just like everyone', like sheep in a herd, is tantamount to being 'no-one' and thus no individual can be blamed when 'groupthink' leads all astray. Besides acquiescing to general norms, the immediate desire to earn appreciation from family members, friends, and colleagues is another priority that easily succeeds. An alternative choice should be to follow the desire to act in what one knows to be environmentally responsible ways and to ignore 'general' or 'everyday' attitudes that lead away from that end. But, clearly, the alternative is more difficult to follow than to acknowledge.

Eighteenth century discourse had already focused on the struggle between acting rationally regarding long-term ends and fulfilling immediate desires. Like the earlier mentioned gaps between knowledge and decent actions, these tensions actually inspired educational aspirations over the ages that have yet to find a satisfactory solution. Yet, these aspirations are based on reason, such as for increased social administration and a strong control over nature (Habermas, 1995). Therefore, the gap between knowledge and actions can also exist at an institutional level. Science, technology, industry, and administration have become a conglomeration in which the relation between theory and practice consists of utilizing scientifically proved techniques. The Enlightenment project has thus become a matter of strategic manipulation, and the promised liberation has left only instructions about how to manage objective processes. In these processes, the individual does not know how to distinguish technical and practical (moral) power. Instead of discussing the consequences of scientific development, members of society start to believe and accept that their entire lives are technologically controllable. According to Habermas (ibid.), the only way to break this trust in technical control is through resolute critical discussions that can liberate people from dogmatism. Foucault, on the other hand, talked about scientific knowledge as “games of truth” (Foucault, 1997e, p. 297), like the general rules that govern most discourses, and power as “games of strategy” (ibid., p. 298). He stressed that critical philosophy has to discern these numerous games and their relation to the subject. Therefore, when Habermas suggested communication, Foucault suggested, “Make freedom your foundation, through the mastery of yourself” (ibid., p. 301). However, one does not exclude the other.

In Western philosophy, reason has been regarded as evidence of the superiority of humans over other animals. Acting irrationally, then, has been equated with animalistic, uncivilized behavior, and with the holy soul as being trapped in an animal body (e.g., Suutala, 1996). A human being, ‘the wise man’, is looked upon as capable of reasoning, including moral reasoning, and as capable of regulating irrational desires. Actually, the conflict between rationality and desire is a problem that Plato had already noted in his *Republic* and something he includes as a basis for his educational program in this famous dialogue. Rousseau was highly influenced by Plato’s *Republic* and looked upon it as the best book ever written about education (see E).¹⁸ When reading Rousseau, the influence of Plato on his thoughts emerges

¹⁸ The abbreviations of Rousseau’s works are described in the beginning of the Bibliography in the end of this book.

unmistakably and, according to Broome (1963), Rousseau's thoughts owe more to Plato than to any other philosopher (see also Kelly, 2009). But they also owe much to Aristotle and to many of Plato's and Aristotle's followers. Awareness of Rousseau's precursors makes it easier to understand certain aspects of the personal as well as social struggles in Rousseau's writings.

The struggle between rationality and desire is a significant feature in Rousseau's book *Julie, or the New Heloise*. In the *Republic*, Plato (580d-581e)¹⁹ distinguishes three types of desires that enslave human beings: firstly, rational desire for knowledge and truth; secondly, spirited desire for achievements like honor, victory and good reputation; and, finally, appetitive desire for things like food, drink, sex and money. Individuals having different types of desires thus have different judgments as to what is good, according to Plato. Wise persons are those who can control their desires by the rational parts of their souls (ibid.). A basic educational aim is therefore to encourage students to change their desires from what they falsely believe is good to true happiness. The cave metaphor, with its dialectical emphasis, is central to Plato's description of what education ought to be; namely, a complete study of what good is 'in itself' (ibid., p. 514). Everybody has the capability of learning what is good but education is needed to learn what is good. Nevertheless, while Plato's education strives to deliver people from already established errors, in *Émile* Rousseau experimented with preventing errors from arising to begin with (Bloom, 1997; Kelly, 2009). Instead of enlightening students to make them change, as was one aspect of emerging from darkness into the clear light of day, Rousseau saw humans as born free and without prejudices (not as sitting chained in a dark cave as in Plato's allegory). Therefore, the best education is not the one that enlightens and liberates, but the one that starts early enough to prevent humans from having their minds enslaved by error to begin with, according to Rousseau (Kelly, 2009). Instead of enlightening the students and bringing them out of their delusions so they change and remember what they had learned in their previous lives, as in Plato's dialectical myth,²⁰ Rousseau saw ideal students as uncontaminated individuals with the innate potential to make good judgments if only somebody pushed them forward and empowered them to proceed. Because unlearning is very difficult once a vice has developed, it has to be stopped from emerging in the first place.

¹⁹ As references for Plato's dialogues I have mainly used J. Stolpe's Swedish translations in six vol. from 2000-2009 and G. M. A. Grube's trans. of the *Republic* from 1992. The reference numbers follows *Stephanus pagination* that is equivalent in all versions.

²⁰ Plato believed in transmigration of souls as typical in Orphism and among the Pythagoreans.

Goodness is a basic purpose in the education Rousseau pictured, not as knowledge, but as a practice and a mode of being. Human beings are born good,²¹ according to him, but their natural goodness is destroyed by society which interferes with the development of the good part of the soul. In society, the initially innocent child loses its natural ‘grace’; poor education moves the child increasingly farther from its natural goodness. According to Rousseau, although human beings are initially harmless, they have to practice goodness to avoid evil and thus become capable of participating in cooperating with others in the building of a good society (e.g., E). In this emphasizing of practice he is reminiscent of Aristotle.

Carr (2003) maintains that Aristotle made the relation between education and the good society that Plato wrote of into a practical problem. In *The Nicomachean Ethics*, Aristotle posed “the good life” of happiness as the highest goal of human struggle and the primary goal of education. Aristotle claimed that human beings always aim at something *good*. All knowledge and all intentions strive for the good (1095a).²² The noblest and highest good in accordance with complete “virtue” is happiness, but what happiness is depends on context, time, and practical needs (1097b). Therefore, Aristotle did not believe in any singular universal good, but that good was elastic and plural. Happiness consists in the exercise of virtue. It is not a selfish but an ethically selfless endeavor, although the masses see happiness as pleasure and act almost like cattle while sophisticated people see happiness as honor, Aristotle argued (ibid, 1095b). Virtue, in accordance with Aristotle, is ethics that is born from custom or disposition and realized in praxis (Silfverberg, 2005). However, while goodness and “the good life” can be the same thing, this is not the rule. On the one hand, education can promote “the good life” for an individual in the present, while on the other hand, a good life in the long run for the whole humanity and even the whole universe can, and often is, impeded by selfish individualism. Only the far-reaching aim of a common good life verges on goodness. In *The Nichomacean Ethics* Aristotle claimed that humans often blend happiness with pleasure, and education thus has to prevent the young from developing a craving for exaggerated pleasure.

²¹ ‘Good’ is here not the same as morally good or virtuous, but means ‘without original sin’. According to the Catholic doctrine, children were born with original sin and only the sacrament of baptism could wash it away (Heywood, 2007). St Augustine (Augustinus, trans. 1954) even argued that no naturally innocent children exist. See more about this in Chapter Four and Five.

²² The references to Aristotle’s books relate to different translators, but they all follow the *Becker numbers*, which are independent of editions.

Aristotle distinguishes two parts of the human soul, one rational that directs reason and the other irrational. He also divides the rational part of the soul in two: firstly, a part that perceives things that cannot be altered (this ‘scientific’ part obeys reason) and, secondly, a part by which it is possible to investigate things that can change (this ‘estimative’ part possesses reason and thinks). The irrational part, in turn, consists of a vegetative part (e.g., physical growth, nutrition) that does not communicate with reason and an appetitive part that has desires and to a certain extent, at least, listens to reason (e.g., takes close relatives and friends in account). Three parts of the soul have authority over actions: intellect (or intuition), sense (power of sensation), and desire (*The Nichomacean Ethics*, 1139a). Humans can think, reflect, judge and steer their desires by help of the will. We have the freedom to judge and purposefully choose (following the dictates of the will) between various desires, but the will is independent of desires. ‘Right actions’ are thus the result of making rational decisions to follow the right desires, whereas ‘wrong actions’ are the result of following wrong desires and neglecting rational thoughts. However, this is no easy equation, since there are many answers on what is right or wrong.

Although different in many ways, a noticeable feature in both Plato’s and Aristotle’s thoughts is that the problems of society and individuals interrelate. Social problems, therefore, have an impact on the individual and vice versa (e.g., Plato’s *Republic*, 462d). Humans have to learn to master themselves;²³ the good part of the soul needs to combat bad desires and through that struggle the individual becomes a good member of society (ibid., 431). Rousseau adapted this Ancient view of the individual’s relation to society, and it is apparent in his ethics. The social role of Ancient ethics was also under consideration in Foucault’s ethical studies.

Even if both rationality and emotions are involved, without aspiration or *will*, one does not achieve anything. The will allows individuals to act with a purpose they have set for themselves (Lübcke, 1988). When it comes to the problem of global injustice, knowledge cannot overcome insufficient emotional engagement and lack of will: the entire struggle between knowledge and desire is often thus reduced to silence. Philosophers and theologians have been engaged in discussions of whether

²³ Foucault interpreted the word “self” as the ways the soul uses the body through diverse tools and language. The way the soul becomes a subject of actions relates to the Greek *khēsthai* that entails various relationships one can have with oneself, but also with other persons or objects. Therefore, these relationships can take the forms of attitudes, honors, worship, etc. To take care of the self is to take care of one’s soul and its relations to diverse things, but also to take care of the form of the soul (Foucault, 2005, see more about this issue in Chapter Five).

humans have ‘free will’ or not and if they can rationally and purposefully tackle their desires and act mindfully and autonomously. Nonetheless, this has become a marginal educational problem that the last two centuries has downplayed on behalf of strictly cognitive educational interests. Voices have been raised, however, on behalf of an education that fosters an autonomous ‘will’ that is capable of dealing with one’s own desires. A zealous philosopher of education defending this view in the beginning of the 19th century was Herbart, who emphasized that education should not have only cognitive purposes; instead, it has to foster morals, as well (see Oettingen, 2001). For Herbart, moral education helps children learn to know themselves, and it presents several moral options from which they can choose, thus not pointing to any particular one as the right one. Children are thus summoned to make their own decisions and to act in accordance with their own judgments, according to Herbart (*ibid.*). Payot (1909), a century later, was upset that education neglected nurturing the will; instead, he saw the will as the most powerful human trait. For him, without the strength of one’s own will, individuals become lazy and their life governed by mindlessly habitual behavior. All misfortunes come from weakness of the soul, in this view. Still another century later Uljens (2006, 2008) argues that education should pay attention to fostering the will and try to develop the student’s ‘sense of judgment’. At the beginning of the present century, an increasing number of researchers have also noted that ‘desire’ is a neglected topic in education (see, e.g., Thøgersen, 2010). This is a remarkable oversight since education should help mediate between desire, power, and control, not ignore them. The human intellect—the life of reason—has been the primary target of education and the bodily desires have especially been shunted aside (*ibid.*). According to Thøgersen, Rousseau can help us reflect on what desire means in human life and how it can be educated.

Starting with Plato, but also as seen in Rousseau’s theory, the conundrum of whether education shall strive for a given or open end is exposed, and many researchers in environmental education continue to discuss this issue today. Rationality has been a basis of and is still a frequently discussed in relation to liberal education (Halstead, 2005). For some, the promotion of rationality is analogous with encouraging critical thinking and results in an education without specific ends. For others, liberalism can never be neutral regarding aims such as justice and equality (*ibid.*). Foucault distinguished the word “processes of liberation” from the “practice of freedom” and saw freedom as a more profound and transforming act: an act that makes change on the individual’s internal level (Foucault, 1997f, p. 283). Educational

researchers interested in Foucault's theories also discuss these issues, especially the consequences of neoliberal education and of supporting self-serving independence and autonomy as its educational aim (see, e.g., Marshall, 1996; Wolff, 2008). "Indeed it can be said that to advocate autonomy as an educational aim, undermines the traditional welfare state, as well as all other strategies of collective action that are necessary to human survival and well-being in a global age" (Olssen, 2006, p. 188). This means that an education that promotes autonomy without social responsibility is a deathblow to prospects of mutual agreement and action, such as the need for responsible actions on behalf of the entire earth. The apparent tension between rationality and desire thus easily brings to light the multiple tensions in contemporary education between individual autonomy, social goals and human survival. Autonomy may imply both freedom to fulfill desires (to act as one wants to) and freedom from desires (not to be a slave under one's own desires).

For Rousseau, freedom was something internal, not a matter of insubordination and he claimed that humans are born with a 'free will'; that is, with the potential of making their own moral choices. In addition, he argued that a just and equal social life requires that everybody subordinate themselves to the 'general will'; that is, the common will becomes an obligation (SC).²⁴ In Foucault's interpretation, "[f]reedom is the ontological condition of ethics. But ethics is the considered form that freedom takes when it is informed by reflection" (Foucault, 1997f, p. 284). However, there are many connections between their views, but I will return to the issue in the concept definition below and in Chapter Five that deals with ethics.

According to Foucault (e.g., 1986b), since the beginning of the modern age a major problem has been that Ancient ethical practices have been replaced by a rigid and unwarranted trust in objective knowledge as the only access to truth. Instead of considering the search for truth as a self-transforming process, knowledge itself has been mistaken as the only way to truth. Referring to Seneca, Foucault (2005) reminds us that knowledge alone cannot cure ignorance. But, through one's ethical practice the individual's 'care of the self' is an active choice to transform one's self; it is a way of achieving mastery over one's desires. Importantly, 'care of the self'²⁵ is not an egoistic process; it is an action that includes relationships to others, where the individuals are involved with each other through shifting constellations. These power

²⁴ I will discuss Rousseau's view of both the 'free will' and the 'general will' in Chapter Five.

²⁵ The Greek *Epimeleia heautou* in Latin has been translated to *cura soi*. Foucault's French translation *Le souci de soi* is in the English versions of his books translated to 'care of the self' or 'care of oneself' and means the same as 'attending to oneself' or 'being concerned about oneself' (Foucault, 2005, p. 2).

constellations interrelate like games²⁶ and connect the individual with the joint shaping of freedom and knowledge (Foucault 1997e, 1997f, 2000g). Knowledge²⁷ is thus not an objective thing or a matter of free-floating ‘facts’; it is a collective undertaking that involves everyone individually and socially in interaction with the many relations of a person’s life, both rationally and emotionally, including self-relation, relation to others, and to physical nature. “Subjects exercise freedom in critically reflecting on themselves and their behaviour, beliefs and the social field of which they are a part” (Oksala, 2002, p. 27).

Rousseau was critical of the Enlightenment’s strong emphasis on rationality, but rationality was nonetheless a functional element in his philosophy. Foucault declared that the most essential and critical philosophical question since the 18th century is how humans maintain their existence as rational beings when rationality in itself is hazardous (Foucault, 1989), an argument that shows Foucault’s skepticism of rationality in comparison with most Enlightenment thinkers. However, he noted that one does not have to be for or against the Enlightenment and need to escape the principles of rationality; rather, one has to accept that the Enlightenment was an event or set of events that has made us who we are (Foucault, 1997h). The problem is not rationality as such, but the form it can take (Foucault, 2000c, 1997h).

1.2 Naming and Concepts

Education, nature, and sustainability are key words in the title of this book. With this choice, I intend to bring these three issues strongly into focus, both individually and as they interact in practice. It is a book concerning education in general and examines ideas about humanity’s relation to nature and the role of education in the ambition to

²⁶ “[W]hen I say “game,” I mean a set of rules by which truth is produced. It is not a game in the sense of an amusement; it is a set of procedures that lead to a certain result, which, on the basis of its principles and rules of procedure, may be considered valid or invalid, winning or losing” (Foucault, 1997e, p. 297).

²⁷ The English word knowledge has two distinct interpretations in French, *connaissance* and *savoir*, and there are various definitions of these words. Foucault (2005) interprets *connaissance* according to his Ancient studies as pure knowledge belonging to the realm of knowledge having a rational structure, knowledge of a domain of objects. He saw *connaissance* as a Cartesian kind of knowledge. It can denote knowledge about the self but, in that case, is objective knowledge of the self is without spirituality, according to Foucault. Conversely, *savoir* stands for knowledge where the truth is a *technē* for affecting and transforming the subject. The subject has to exercise the knowledge; it is a reflected system of practices connected to *askēsis*. *Savoir* is knowledge that forms *ēthos* and can free the subject. Even when it is knowledge about the world, it is not objective, but it transforms the subject.

promote a more sustainable life. *Rousseau* and *Foucault* in the sub-heading identify the two figures whose theories will occupy the second part of this research. Consequently, the task of the title is to both convey the principal scope of the whole book while pointing to its focal points. In addition to these topics, and with the exception of *Rousseau* and *Foucault*, along the way I will clarify how I understand other common terms and concepts important to the themes of this book; for example, *learning*, *freedom*, *environment*, *sustainable development*, *human being*, and the central topic, *humanity's relation to nature*.

Education in its Complexity

The word education has multiple meanings in the English language. It can entail learning and experiences of many kinds, teaching in many situations and with many kind of targets, instructing, tutoring, studying, training, coaching, schooling, acquiring of knowledge both in schools, universities and other institutions (formally) or in arranged situations outside schools and educational systems (non-formally) and in daily life situations (informally). When the word “education” is used as synonym for “pedagogy” it entails the *science* of studying the philosophy, history, politics, psychology, sociology, curriculum theory, and practices of education. Beside concrete instruction, the aims of education, the processes of learning and the contexts where learning takes place, are also of scientific interest. When one uses the word “education” to describe the educative process it is not self-evident that it means the direct transference of knowledge (etc.) from teacher to students, with the intention of enhancing their theoretical understanding or practical abilities. Education can also involve self-directed and group learning. Even when “education” is used as a synonym for “instruction,” it entails so much more than transmitting information, facts, and data from one person’s brain to another’s, or from a computer or book to students. In this book, “education” implies all kinds of teaching, fostering, and developmental processes, regardless whether the process is led by a teacher, or whether learning or improvement comes about through interaction or is self-governed. I will especially discuss what Ringborg calls “education as control”²⁸ and describes as “one of the oldest and most vital educational processes” (Ringborg, 2001, p. 50, Wolff’s trans.). Shaping of humans into perfected creatures has been an

²⁸ In original language, Swedish, Ringborg talks about *pedagogik som påverkan*.

educational dream throughout the world since Ancient times (Compayré, 1953; Passmore, 1970). Education, therefore, generally aims at producing results for students that are better than before the students begin the educational process.

Like “education,” the word “learning” has many interpretations, and “learner” has gradually replaced the words “student” and “pupil”: the one who learns receive some kind of new knowledge, talent or insight. Nevertheless, every student in an educational situation does not necessarily learn and, of course, does not necessarily study, either. Moreover, what they learn can last for years or disappear rapidly because so many elements affect the learning. “Learning” comes about in many various ways. If, when and how learning happens is dependent on myriad elements that affect the learning situation, such as the environment (place, set of conditions, atmosphere, etc.), attitudes (the teacher’s, student’s, of the learning materials, etc.), earlier experiences, other persons involved, motivation, and so on. The things one has learned can be stored, used or forgotten. Education can aim at “transmission” of traditions and habits in a particular society, or “transformation” that promotes a change of thinking or practice. The aim of an education that strives towards transformation can either be to merely change the individuals or to empower or sway the individuals to change society. Any change, on the other hand, can either be directed towards a given end and thus be a result of a purposeful normative instruction, or the outcome can be open-ended and the transformation unpredictable. Change of moral conduct is never completely predictable—especially not long-lasting change.

Moreover, with education comes the complication of “power.” According to Foucault, power is “a certain type of relation between individuals” (Foucault, 2000c, p. 324). In social contexts, power, right and truth interact and shape discourses (Foucault, 1980c). Every field of discourse (science, education, health care, etc.) creates comprehensive power relations that shape net-like systems. Power is not necessarily hierarchical, but it circulates and subjugates the freedom of individuals (Foucault, 2000c). When one person teaches another, the teacher decides about aims, methods, timetables and other factors; but behind every teacher or student, in every particular educational situation, is the often-neglected complexity of hidden power constellations. To uncover this complexity, critical discourse is urgently needed. Power is, however, no easy one-way relation and cannot be taken as merely something negative, because power can also enable freedom (Ricken, 2006), as I will describe in Chapter Four. The way one understands power involves how one

understands oneself objectively and the relation one has to one's own person (ibid.). The role of power in education can, therefore, take form as both repression (obligation) and empowerment (possibility).

Since Rousseau and Kant, many social scientists and philosophers have interpreted the concept of 'freedom' in a double sense. The two extremes of freedom are, *positive freedom* (*internal* freedom, freedom *to*, *self-fulfillment*), and *negative freedom* (*external* freedom, freedom *from* external constraints, freedom in relation to the demands of *others*) (see Kant, 1788/2002; Plant, 1995). This division is only a hypothetical construction to show contrary and polarizing forces since negative and positive freedoms always are in dynamic interaction. Yet, the distinction is important to keep in mind in educational discussions and when discussing Rousseau's and Foucault's ideas. In the forthcoming chapters I will mainly use the concepts of 'freedom' and "autonomy"²⁹ to entail positive freedom. "Freedom is necessary for moral responsibility" (Yaffe, 2003, p 335n), but "manipulation" undermines freedom. Yaffe distinguishes two kinds of manipulation, "indoctrination" and "coercion." "Indoctrination is defined as causing another person to respond to reasons in a pattern that serves the manipulator's ends" and "coercion as supplying another person with reasons that, given the pattern in which he responds to reasons, lead him to act in ways that serve the manipulator's ends" (Yaffe, 2003, p. 335). When education focuses on controlling the growth of the young generation and more or less on force-fitting students into a prescribed direction, education becomes a kind of indoctrination (Björk, 2000) or coercion rather than an open-ended process that opens the door to a transforming worldview. The view of education I will discuss in this book is its role as both social and individual transformer and relates to what education *is* (reality), what it *could be* (visions), and what it *ought to be* (aims).

Nature and Natural

One of the central concepts in this study is the noun "nature" and the related adjective "natural," two complex words that are difficult to interpret. Their origin is in the Latin word *natura* (birth) and *nasci* (born) (Soanes, 2003; Harper, 2001-2010), deriving from the Greek word *physica* (physics). Physics was originally the word for

²⁹ The word "autonomy" has been interpreted in many ways in educational discourses (see, e.g., Marshall, 1996).

the surrounding world upon which humans depend and the first name for philosophy (Deely, 2001). Beside the physical world, both *natura* and *physis* also represented physical laws and thus the *logos* or meaning of life (von Wright, 1993). Nature is a problematic word loaded with history and multiple meanings (see Roach, 2003). Although, the word is common in daily language, there are many different perspectives about what the word encompasses. Lovejoy and Boas (1935) distinguish 66 meanings of the word in their book *Primitivism and Related Ideas in Antiquity*. Contemporary encyclopedias also interpret the words nature and natural in very many ways, for example in *Webster's Encyclopedic Unabridged Dictionary* (1994) "nature" has 20 different meanings and "natural" has 30. Among the first listed interpretations in Webster's are nature as *a native or inherent character* of a person, an animal, or a thing, followed by *the instinct directing conduct* and other understandings about features characteristic of something or somebody. The sixth explanation is nature as the *universe* and the seventh sees nature as a term for *the natural world*.

Many values similarly burden the concept of "natural"; it can be a criterion for something good and desired, but also for something bad and rude. A reverse strategy for revealing the meaning of the word is to search for its opposites: for example, supernatural, artificial, or inorganic, but even then the list seems to be endless. It is more or less impossible to reach a satisfactory definitive meaning for the word nature, as the question does not have any universal answer. Neither in daily language, nor in science or metaphysics are there any definite interpretations; the answers vary depending on when the question is raised (time and context) and by whom, as well as who responds to it and when this response takes place. "Nature can be infinite, finite, stable, chaotic, teleological, contingent, eternal or forever changing," writes Lähde (2008, p. 37), and he highlights the fact that it is very easy to slip from one meaning to another during a discussion. The risk that we merge different meanings is especially large when we consider nature from a historical perspective. However, the word (and its interpretation) is going to be one of the main concerns in this research, and it will make no sense to give nature any more of a thorny definition at this stage. Such an attempt might remove a part of the curiosity to continue reading.

The reason I have chosen "nature" and "natural" as starting points is because these words are gradually losing their significance. These days complicated and even

vague concepts:³⁰ for example, biological, ecological, environmental, sustainable development, and biodiversity (not to mention important concepts related to such concepts) rhetorically provide a "protective face" for nature. These concepts easily make nature into something neutral, as though apart from human beings, while the role of humans as part of nature and inescapably in personal relations with nature is too often ignored. The genuine world of nature hides in new concepts like "environment" and "sustainable development." The "natural environment" is a part of a broader environment, while the concepts "ecologically sustainable development" and "biodiversity" have taken over as primary concepts for discussing the natural world using the rhetoric of "sustainability." These changes are remarkable and consequential. I will thus start my study of Rousseau's writings with a glance at what the word "nature" generally implied at the time when the Western world stepped with all seriousness into the modern era. After that, I will approach nature and natural as ethical aspects in his writings. However, given the variables mentioned above, the meaning of the concepts "nature" and "natural" in this study vary considerably according to context under discussion and are not intended to be directly comparable between those contexts. I will try to face this difficulty as truthfully as possible.

Human Being and Citizens

This study also often employs the concept of *human being* (Latin *wise man*) or *human*³¹ that entails being a member of the species *Homo sapiens* and its only subspecies *Homo sapiens sapiens*. That subspecies 'includes all people presently alive'. Zoologically, 'Homo sapiens' belongs to the family *Hominidae* and genus *Homo* (see, e.g., Roberts, 2007). In social research it is more common to talk about people or persons, but by talking about 'human beings' or references to being *humans* call attention to my intention not to separate the human species from other animals and not to look upon it as superior to, 'higher' than, other species. I am nonetheless

³⁰ Please, do not understand this as a naive critique of the mentioned concepts. They are useful and accurate in many situations, but people often overuse them and apply them in odd connections where the initial meanings of the words are lost or hidden. In this book, I will thus employ these concepts without special restriction wherever I find it necessary for a proper understanding.

³¹ I use constantly the word *human* instead of Rousseau's 'man', when it is obvious that he talks about both sexes. According to J. T. Scott (2006), Rousseau used the word 'man' to make his claims genderless; but I agree with Lähde (2008) that even if Rousseau follows the French practice (*l'homme*), certain gender biases are obvious. Okin (1996/2006) even claimed that Rousseau basically talked about men, and therefore used the word 'men'.

aware that I might be accused of uncritically employing a concept from a classification system that denotes preference for a particular view of nature.

However, whatever word is chosen cannot be neutral; any word will be colored by existing worldviews of my own culture, in which humans are either regarded as distinct from the rest of nature or, instead, as objectified and classified in a hierarchical system of animal taxonomy. Many interpretations of the word “nature” incorporate such a dualistic view of nature and humans as distinct and apart; such meanings have been associated with the word “nature” from the very beginning of recorded history. Without this particular word there would hardly be any separation; nature and humans would be indivisible. This heavy burden of history makes it difficult to talk about humans in relation to nature without ever using the dualistic expression “humans *and* nature”; completely avoiding the conjunction “and” is almost impossible. In parallel with references to human beings I will also talk about “we” “our” and “us” especially in referring to the present, since I am and all readers are human beings. Unfortunately, nature is always categorized by the words used in connection with ‘it’ (Börjesson, 2003), and neither “human being” nor “we” is neutral. The history of Western thought has trapped us in the language we use (Roach, 2003), as Foucault also stressed. And this trapping has taking place long before the modern era.

When a human being is situated in a society the concept of *citizen* is in common use. One can interpret the meaning of the word “citizen” in several ways. In many political documents, the word entails a member of society in general. According to Rousseau, citizens were active committed participants in the political affairs of their society. In contemporary social sciences, the word often means that a person has *national citizenship* holding juridical rights as a member of a country. Organizations may use the concept of *active citizenship* to depict people acting responsibility on behalf of their societies. Since many people are refugees and do not enjoy national citizenship from the countries in which they live, the concept of citizen is, therefore, also complicated. What it means to be a “citizen” is thus not entirely clear.

Humans and Nature

It is important to distinguish the difference between the words “nature” and “environment,” not at least in connection with education; “nature education” and

“environmental education” are not the same thing. It appears that human interests have changed the concept from nature to environment; so-called ‘natural resources’, such as oil and coal are not inherently ‘resources’, but human activities that makes them into assets for the use of humans (Schnack, 1988). Moreover, as resources they become economic and social issues that are thus part of our environment. It is also possible to clearly distinguish environmental issues as matters that arise in the natural world but have effects on public spaces (Belshaw, 2001). However, when tracing the word “environment” backwards in time, it easily grows larger. The English word “environment” is almost similar to the French, where it has its origin. The French word *environnement* comes from the word *environ* (adv.) that means ‘around,’ (*en-*, ‘in,’ + *viron*, circle, circuit from *virer*, ‘to turn’) (Harper, 2001-2010). The word can be split into *environ de nous*, meaning something that one sees when turning around (*en virant*), a meaning that comes close to what philosophers call the “external world” (Chappell, 1997) and, secondly, the interpretation of nature as “physics” discussed above. When juxtaposing “environment” with the “external world,” environmental philosophy becomes much more than a discrete topic; it is inherent to the discipline (*ibid.*). Similarly, if “environmental” was seen as embracing the entire external world, the view of environmental education would rise to something much more profound than as a mere supplement to general education.

Sauvé (2002) recognizes a change in the interpretation of the word “environment” over the 30 years of environmental education. From merely just one more ‘subject’ of study, it has become much more wide-ranging. She argues: “The weft of the environment is life itself, at the interface between nature and culture. The environment is the crucible in which our identities, our relations with others and our ‘being-in-the-world’ are formed” (Sauvé, 2002, p. 1). The definitions of “environment” are many, even contradictory, according to Tani (2006); therefore, as was the case with the concept of “nature,” it is difficult to arrive at a single, definitive meaning of the word. Tani ranges across three dimensions of the concept. Firstly, she distinguishes environment as an *entity*: a scientific approach, where the view of environment is at a distance and an object for study. Secondly, she sees it as *experiences*: the environment is the area around a particular individual, a space for daily life experiences. Finally, she considers it to be a *social and cultural construction*: the environment as a culturally and politically created phenomenon (see also Tani & Suomela, 2004).

Sauvé (2002) divides the way humans *relate* to the environment into seven different categories: as nature, as a resource, as a problem, as an eco-socio-system, as a place to live, as a biosphere, and as a community project. This is neither a value neutral nor an unequivocal division; rather, it is derived from various ideas involving social research, such as Louis Goffin's view of systems theory, Arne Næss' deep ecology (see Chapter Two in this book), James Lovelock's Gaia Hypothesis, scientific biodiversity research, and indigenous peoples' conceptions of the universe. Sauvé is aware that her diverse interpretations of how humans relate to the environment make environmental issues difficult to grasp in education. Her list is, however, a good starting point for discussion.

In Willamo's (2005) definition, a "nature relation" entails all human interactions and associations with other parts of nature, whereas "environmental protection" deals mostly with *problems* that arise from these relations. Given this definition, environmental protection then becomes one part of humans' relations with nature. That relationship causes problems that need treatment and the treatment brings about a new relation. In addition to Willamo's definition, and in agreement with how strongly he associates the human body as a part of nature, I will also include humans' relation to themselves and their own bodies as humans' relationships with nature and will advance this conception in my study. The relation of humans to nature is, thus, more than one-dimensional; it is multifaceted and involves countless intertwined interactions, including dreams and realism, love and hate, admiration and disapproval, fear and confidence (see Roach, 2003). These, in turn, produce many tensions and concerns, desires, reasons, and dreams. In my study of the complex features of humans' relations to nature, I look at, first of all, what is meant when referring to "nature" and "natural" and, then, at what could be meant by 'having a relation to nature' in the 18th century. On the other hand, I will discuss what the meaning of "nature" and having a 'relation to nature' can entail today.

The third central concept of this study that relates to nature and education is "sustainable development." In brief, the concept describes social and economical development where the utilization of nature resources takes place with future generations' life opportunities in mind. The background and interpretation of this relatively new concept will receive more detailed consideration in Chapter Two. While I am critical when the word "development" is used to denote indisputable belief in steady economic and technological growth or progress, like many other writers I am going to use the single concept of *sustainability*. By the word

“sustainability” I mean management of the earth in a way that does not damage life but that preserves its various life forms for the future.

1.3 A Cross-Modern Study and a Stepwise Design

The issues of ethics, freedom and the gaps and tensions I have described in this opening chapter will be considered in one way or another in this book, but mainly in connection with humanity’s relationships with nature, sustainability, and education. These tensions continually fuel my curiosity and provide the direction for my exploratory trip into both our present time and as concerns the role of nature viewed in historical perspective. It also guides my reflections on contemporary issues, especially the quest for sustainability. The struggle between rationality and desire, as well as between duty and freedom, takes place repeatedly in the aesthetic language of Rousseau that is exceptionally transparent on these points and does not hide such tensions, but still does not solve the problems. It is also a central theme in the philosophy of Foucault, who examined the Ancient Greek and Roman philosophy in which ethics was considered the conscious practice of freedom. Both Platonic ethics and Stoic philosophy create threads between the ethics of Rousseau and Foucault, and with these ideas I hope to bring new views to contemporary discussions about whether education can promote sustainability and, if so, how best to do it.

The point-of-view I have chosen for this study is neither straight-forward nor one-dimensional; it is, therefore, difficult to locate it in a single discipline. It could easily be classified as either history of education, environmental education or history of ideas, but its diversified features makes such labeling complicated and even pointless. My main interest is theoretical education, but such educational research draws upon many other research areas. Scott (2009) takes note of the problem that environmental educational researchers often have performed research in isolation and thus have not been able to embrace other research fields. Yet, in attempting to avoid a strict disciplinary locus and to, instead, draw from several alternative and diverse approaches, my study has faced the many challenges typical to other multidisciplinary research efforts. However, by relying on a multidisciplinary approach, I am able to discuss my ideas in various disciplinary contexts and thus hope to reach readers other than the customary followers of environmental education. I have, therefore, felt free to mix approaches and met Scott’s call for risk-taking.

As a multidisciplinary study, the target of my book is an audience with diverse backgrounds and interests. I have chosen to overcome the problem of meeting the needs and interests of this expected diversity by varying the style and focus, from particular views to broad discourses, from philosophy to history of practices, and trying to move as smoothly as possible between arenas belonging to different disciplines. My sincere intention has been to do this without losing track of common themes and interest and thus boring my audience. Although the book works as a whole, most chapters are self-contained narratives engaging a specific topic. The design of the study follows a stepwise process divided into three distinct phases: Parts One, Two and Three (see Table 1). I will critically analyze discourses and networks of discourses about nature, sustainability and sustainable development, ethics, knowledge, and education. The story begins with the birth of environmental education a few decades ago and then jumps to the Renaissance, then follows modern history forwards, until settling down for a while in the 18th century for a deeper consideration of the particular case of Rousseau. Finally, it returns to the present time and looks to the future.

With this looped process, I have wanted to shape a story about how humans' relation to nature has been *problematized* as it moves from distant times to the current problem of sustainability in hopes of promoting a more comprehensive view. Another intention is to identify crucial ethical and educational dilemmas that are necessary to reflect on in relation to the role of education in promoting sustainability. Through the example of Rousseau, I want to show how sustainability is a problem that touches fundamentals of human life on many levels. In my judgment, Rousseau's writings offer excellent examples of both the importance of ethics and education in dealing with this problem. And with the help of Foucault, I want to set the stage for understanding such fundamental ethical and educational issues as matters of power whereby the internal struggles and improvements of humans towards self-actualization and personal development are located in a much larger network of struggles shared by society, even across the world. The sustainability enigma is extremely complex and, therefore, so much more than just one educational 'subject' among others and my intention is to try to demonstrate that by reference to two of the most notable scholars in the Western intellectual tradition. Both have deeply reflected on the role of humans in today's world and have helped guide and support my conclusions about the ethics of education in relation to the quest for sustainability.

Table 1 The research design.

Chapter		Aim	Method	Main Literature
Part I Sustainability as an Educational Challenge				
1	Introduction	To introduce the problematic	A philosophical discussion	Mainly various basic philosophical sources
2	Gaps and scapegoat jungles	To give a portrait of how education and educational research have dealt with nature and environmental issues in relation to ethics	A critical literature study	Multidisciplinary sources, e.g., history, political documents, literature on environmental education research and philosophy.
Part II Between the Past and the Future				
3	A Foucauldian Rousseau study	To present the research methods	Description of the research methods	Basic works by Foucault and Rousseau, Foucault commentators
4	Modern discourses about nature and knowledge	To presents thoughts and discourses before and during Rousseau's lifetime as examples on what ideas triggered his writing.	A research influenced by Foucault's genealogy	Multidisciplinary sources, mainly historical and philosophical
5	Rousseau on nature and ethics	To analyze Rousseau's ethics in relation to nature	A modification of Foucault's ethical approach	Rousseau's writings about politics and ethics, Rousseau commentators, Foucault's ethics
6	Nature in Rousseau's educational philosophy	To analyze Rousseau's ideas about education in relation to nature	A research approach developed from the one applied in Chapter Five	Rousseau's writings about education, Rousseau commentators
Part III Back to the Present				
7	Rousseau, Foucault and contemporary educational challenges	To summarize, conclude, evaluate the method and return to the present	Critical reflections	

2 Gaps and Scapegoat Jungles

The previous chapter aimed at exposing the target of this study and sketching the historical concern of this book. This chapter starts the ‘winding loop’ by observing what has taken place during the last few decades and earlier in world history. Firstly, I will frame how humans’ relation to nature has come to engage education and discuss the educational challenges related to nature and the environment that humankind faces today. Unfortunately, the educational path that could promote an alternative relationship between human beings and the rest of nature has many gaps; therefore, I will continue the discussion of the gaps introduced in the previous chapter and identify a few more. Secondly, I will compare various educational suggestions about how to answer the challenges caused by humans’ relation to nature and the resulting quest for sustainability. The focus will be on educational discussions and strategies as well as on research. In addition, I will relate the educational discussion to common ethical theories. Thirdly, I will illustrate how the search for explanations for the current environmental situation has been mostly a search for scapegoats in which various guilty parties are identified. While I neither became convinced enough that any of the accused scapegoats were clearly guilty, nor that any of them were totally innocent, this chapter ends by discussing why this tricky situation needs more investigation and why philosophical perspectives are necessary for any educational process or program faced with the dilemmas of sustainability.

2.1 A Quest for Educational Efforts

Human beings have increasingly developed technologies and lifestyles that threaten nature, including all organisms, and thus the bases of life on earth. Despite so-called “progress,” life is still not safe and just for all people. One reason is that the division and use of natural resources is very unjust and many people do not have possibilities for living decent lives. Widening the perspective beyond the human species, many other organisms are increasingly threatened and some have already vanished

completely. This is even the case in countries with a highly educated population since populations with high degrees do not necessarily act more intelligently in relation to nature. Increased knowledge is not enough of a positive influence. Consequently, either the problematic situation now reached by humankind may be a result of inappropriate practices, or of inadequate thinking built on an inappropriate worldview, or both.

Environmental Education

The harmful impact of humans on the natural world is unfortunately not a new phenomenon. Many signs of this exceedingly long-lasting and worldwide influence have gradually become evident. Agriculture and mining have polluted land, water and air, while hunting and the fishing industry have even radically decimated the number of species in numerous locations. Human *concern* for nature and environment also has a long background and writers have occasionally addressed the problem, but only a few considered nature or environmental issues to be problems facing humankind and the earth until the middle of the 19th century. One of the first books in the genre was Georg Perking Marsh's *Man and Nature*, published 1864. However, the history of *environmental education* and *education for sustainable development* are very short. Environmental issues as urgent educational concerns have a history of fewer than 40 years.

A short background starting some decades ago helps give a broader understanding of the concept of environmental education. Before the emergence of the new concept, the term 'environmental studies' had been used since the 1940s to denote a mixture of geography, biology, and history (Palmer, 1998), but literature expressing a concern about the human future started to appear, for example *Road to Survival* by William Vogt, in 1948. While greater awareness of the precarious state of nature and of increased environmental problems arose in the 1950s and 1960s, this awakening led to a concrete willingness to act responsibly, and Palmer (1998) traces the term "environmental education" back to a conference held in Britain in 1965, the same decade the first textbooks³² were published in this field.

³² It is not so easy to distinguish which were the first books in a genre, because there is often a gradual evolution from a previous to a new stage.

In the 1970s, when it became obvious that industrialization had caused tremendous environmental problems and had damaged the natural world, enthusiastic nature conservation quickly appeared. Simultaneously, a need developed to act globally on behalf of the natural world (see, e.g., Singer, 2003). This in turn resulted in an interest in environmental education with many notable events taking place across the world (see Sytnik et al., 1985). A great number of nature conservation organizations ‘saw the light’ at this time and the *United Nations Conference on the Human Environment in Stockholm 1972* was a noteworthy international assembly that had major consequences for education concerning environmental issues. Representatives from all over the world, from both rich and poor countries, gathered in Stockholm to start a process of global environmental cooperation and to discuss issues connected to the right of all people to a healthy and productive environment. At this conference, delegates drew attention to education’s crucial role in the creation of a social sense of environmental responsibility. One special outcome of this ground-breaking assembly was identifying environmental problems as crucial educational topics. Consequently, the conference announced the *International Environmental Educational Program*, IEEP.

Three years later, 1975 in Belgrade,³³ UNEP³⁴ and UNESCO³⁵ proclaimed the main goals of environmental education in the *Belgrade Charter on Environmental Education*. This agreement was put into place in 1977 when the first environmental education conference at the ministerial level took place in Tbilisi.³⁶ The statements from the Tbilisi conference stressed that governments have to provide education that benefits the environment and an improved quality of life. Furthermore, it stressed that education promoting environmental responsibility ought to be carried out at all levels of education, as well as in informal learning situations and in the training of professionals with the aim of promoting a lifelong and global educational process that is available to all. The most notable goals for environmental education can be summarized as follows (Sytnik et al. 1985, p. 15):³⁷

³³ UNESCO/UNEP International Workshop on Environmental Education.

³⁴ UNEP (United Nations Environment Programme) is a United Nations body established in 1972 by the General Assembly to promote international cooperation in matters concerning the environment.

³⁵ The UN body UNESCO (United Nations Educational, Scientific and Cultural Organization) was established in 1946 with the purpose of upholding international cooperation on education, science, culture, and communication.

³⁶ UNESCO – First Inter-Governmental Conference on Environmental Education.

³⁷ Quoted from Intergovernmental Conference on Environmental Education UNESCO/UNEP, Tbilisi, USSR, 1977, Final Report, Paris, 1977.

- a) to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas
- b) to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment
- c) to create new patterns of behaviour of individuals, groups and society as a whole towards the environment.

The Tbilisi principles for environmental education at the individual level include efforts to improve critical thinking strategies and problem solving, as well as building a capacity for participation in democratic work aimed at producing responsible, motivated and self-confident citizens (ibid.). Many of the goals, statements, and principles from Tbilisi are still present in contemporary educational policy documents³⁸ and the Tbilisi conference paved the way for many follow-up conferences in other countries and built the foundation for the environmental educational work of today. From the beginning, basic efforts in environmental education were to define its role and promote its importance and legitimacy (see also Palmer, 1998). Educational aims concerning the environment, however, were expressed normatively stressing that education has to encourage attitudes towards environmentally friendly living. An education with predetermined aims needs more than one method to encourage the students to judge and choose a living that they find appropriate with their own judgment. The normative attempts have deeply influenced environmental education actions and research until the present day.

The holistic nature of the Tbilisi-documented message (see Sytnik et al., 1985) is remarkable, however, in stressing the need for an interdisciplinary approach and a holistic and balanced perspective. In it, environmental education is regarded as an instrument for changing the orientation of the entire teaching and learning field, not only a part of it, towards an emphasis on holism and a new art of holistic living. Considering the fundamental objectives of such an environmental education, accentuating *awareness* of and *knowledge* about the environment and its problems, promoting *attitudes* and values for protecting the environment, promoting *skills* for handling environmental problems and creating opportunities for *participating* in environmental work, Sytnik et al. (ibid., p. 19) conclude that “all education should be

³⁸ On UNESCO’s homepage December 3, 2009: “Education for sustainable development aims to help people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions.”

an education *for* the environment [italics added].” Particularly notable is that, according to the Tbilisi Conference material, environmental education was not to be a separate school subject, a project based issue, or temporary theme. The role of environmental education was to be “a catalyst, a common denominator, in the renovated process of modern instruction” (ibid., pp. 46).

As a result of the Tbilisi conference and the movement it initiated, environmental education became a key concept and the practice started to expand. So following both the change of focus from nature to environment, including *natural*, *social* and *human-built* environment, and the rhetorical change from nature conservation to environmental protection, there was a gradual change in the vocabulary from “nature studies” and “nature education” to “environmental education” in the 1970s, although the concept had already been uttered earlier for the first time (see also Fien & Tilbury, 2002; Hopkins & McKeown, 2002; Leal Filho, 1996). The *International Union for Conservation of Nature*, IUCN, and UNESCO have played important roles in the development of environmental educational principles along with UNEP, the *World Wildlife Fund*, WWF, and an increasing number of other organizations. Accordingly, environmental education originates in voluntary environmental work and management policy. Environmental education is, hence, like lifelong learning: an example of what, according to Sjöberg (2002), is a theoretical approach initiated externally to educational disciplines.

Sustainable Development and Education

In 1980, the non-governmental organizations IUCN and WWF in collaboration with the UNEP published *World Conservation Strategy*. This document underscored that socioeconomic development and nature conservation are inter-related and that development therefore has to consider environmental issues. The aim of this document was to propose guidelines for a vital world where plants, animals, and people can share a good life. A renewed version, *Caring for the Earth*, was published in 1991.

With the 1987 report, *Our Common Future*, the *World Commission on Environment and Development* (WCED) pointed out sustainable development as a political aim for all segments of society, not the least for education. The aim is thus global—a kind of universal vision of a better future for humankind and a call for new

values and norms of behavior at all levels of society, but without diminishing technological and economical progress. The document summons parents, decision makers, scientific communities, educational institutions, and many others, to partake in activities for a more sustainable future. In the *Chairman's Foreword*, Gro Harlem Brundtland especially emphasizes teachers as important in the work for a better world. While the report stresses economic and social matters as causes of environmental problems, it makes *sustainable development* both a political concept and a social goal. According to the report, sustainable development aims at meeting the basic needs and desires of all people for a better life. Nevertheless, fulfilling present needs is not allowed to endanger the possibilities for future human life on earth (see World Commission on Environment and Development, 1987). The ambition is huge, and the path towards the goal of sustainability is marked by gaps and tensions, so the report does not really propose an easy solution for the world's population. As a result, implementation has not been a clear success.

The discussion offered in the Brundtland report continued in the first international environmental and development conference, the United Nations Conference on Environment and Development, in Rio de Janeiro in 1992—a conference that gathered thousands of leaders from around the world.³⁹ Since this conference, the concept of sustainable development has been politically divided into three dimensions:⁴⁰ *ecological*, *social/cultural* and *economic*. As with the Brundtland report, the Rio conference (also called *Earth Summit* or UNCED) stressed the role of teachers and education in the search for a more sustainable development. In the strategic action program, *Agenda 21*, the 36th chapter deals entirely with education (see UNCED, 1993).⁴¹

After the Rio conference, education for sustainable development has become a common concept in political educational documents at all levels, and it has increasingly embraced issues of environmental protection in discussions and planning. As a result, the concept of education for sustainable development is, especially in politics, used concurrently with the concept of environmental education and the three dimensions of sustainable development (ecological, economic, and

³⁹ About 120 head of states and other delegates from 170 countries.

⁴⁰ This three-fold perspective is a widely accepted alteration of the initially suggested economic, social and environmental division proposed by *Mohan Munasinghe* at the conference in Rio (see http://www.eoearth.org/article/Sustainomics_and_sustainable_development).

⁴¹ Chapter 36 in *Agenda 21*, the resulting major action program from the UNCED Conference bears the title *On Promoting Education, Public Awareness and Training*.

cultural/social) are all stressed as important educational goals (e.g., Tilbury, 2003), and these three dimensions have thus been topics of ongoing concern. This has led to suggestions for enlarging the triangular depiction and for adding new dimensions to it. Cantell (2003), for example, distinguishes six educationally significant *environmental*⁴² dimensions by adding an *aesthetic* and an *ethical* dimension and splitting the *social/cultural* category into two separate dimensions. Kemp (2005), in contrast, uses five sustainable dimensions: to the social and economic dimensions, he adds three dimensions: a *nature-philosophical* and a *juridical* and, in addition, a basic *ethical* dimension. Of these five dimensions he underscores the ethical as fundamental and stresses that nature is much more than resources and can never become completely calculable capital because not merely the natural world but also humans' relation to nature and the vision of sustainability are indistinct factors and thus unpredictable. According to Kemp, then, it is not enough to create an ethics via political economic programs. He searches for a dimension of international justice that might solve the present situation and concludes that sustainability starts with ethics and ends up in law. An ethics for sustainability relies on care for "the other," and the other may be other persons as well as all other living creatures and their right to live (ibid.). A seminar arranged by UNESCO in connection with the second global environment and development conference, *The World Summit on Sustainable Development* (WSSD, Rio +10 Conference), held in Johannesburg 2002 also stressed ethical responsibility, strategies for poverty elimination and improvement of life qualities as important educational issues (Tilbury, 2003). In order to encourage value clarification and develop social responsibility, Tilbury also recommends that education for sustainability should promote a critical and creative attitude towards one's own culture in order to reveal the multiple assumptions that influence one's daily life.

Theories and Goals Contrasting Practice

The conferences, programs and other proceedings mentioned above are only a fraction of the key events and developments concerning environmental education and education for sustainable development. Many others have also taken place, books have been written, working-groups have met, curriculums have been designed, and

⁴² See the interpretation of the concept 'environment' above in the Introduction (1.2).

lessons have been taught, and so on. In addition to what have already been mentioned are the more recent *Earth Charter* and *United Nations Millennium Development Goals*. The earlier mentioned Brundtland Commission called for a new charter to set norms for a transition to sustainable development. After a long working process, *Earth Charter* was finalized in 2000. The document is an international consensus about the meaning, challenge and vision of sustainability and it is now in use as a basis for sustainable development negotiations and processes in many contexts (see The Earth Charter). With the change of the millennium, world leaders adopted the *Millennium Development Goals* as another blueprint for the future of humankind. These goals strive to: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduce child mortality; (5) improve maternal health; (6) combat HIV/AIDS, malaria and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development (United Nations, 2009). Some of the global problems addressed by the *Millennium Development Goals* have decreased in the first nine years following their launch (e.g., the number of people dying from HIV, and children not attending primary education), while others have increased (e.g., poverty). The global economic crisis at the end of the first decade of the new millennium is one cause of lack of progress because the poorest people have the most to lose (Ban, 2009). Numerically the goals have been optimistic, but the current UN secretary general Ban Ki-moon (ibid., p 3) is still hopeful when he states that the “global community cannot turn its back on the poor and the vulnerable,” but have to “strengthen global cooperation and solidarity.” Maybe it is not a question of hope but of desperation. Yet goals do not automatically promote actions for change.

It is not only general global development goals that have generated interest but, unsurprisingly, also the goals, content, and methods of education for sustainable development. Given the number of meetings, reports, and documents, most likely more has already been said than done in this field. Discussions of sustainable development have become routine at various levels, but this does not automatically mean that sustainable processes and sustainable action take place on a daily basis and on a scale that truly meets the needs of the entire world and its inhabitants. To have goals is unfortunately not enough—especially as long as there is insufficient commitment to the goal of sustainable development, a goal that is not even generally accepted. A diffuse and even contradictory goal may slow down willingness to change and, for that reason, Jickling (2001) encourages educators to move beyond the

goal of sustainable development and instead to concentrate on what sustainable development *is not*. This entails talking about intrinsic values and daring to criticize what is taken for granted in present day societies.

Critics and Failures

The previous chapter has already dealt with gaps concerning the complexity of human life and the differences between knowing and doing. This chapter started with a history that described a sea of global negotiations and goal settings and showed that it might be easier to defend a better world verbally than in practice. Similar phenomena exist in smaller contexts, for example in schools. There is a significant gap between *environmental educational rhetoric* and *philosophy* in relation to *reality* and *educational practices* (see, e.g., Palmberg, 2000; Sauvé, 1999; Stevenson, 2007), and this gap has not decreased during the last 20 years (Stevenson, 2007). Despite enthusiastic efforts, the challenges facing this field are still huge and when governments tend to see the public schools as instruments of political policymaking and enforcement, the situation becomes paradoxical. The rhetoric of environmental education extols ecological harmony and a better life for all people on earth, including social justice and equal rights to natural resources. This is, however, in contrast to contemporary European as well as international educational policy documents that focus on educating autonomous individuals with responsibility first and foremost for themselves⁴³ (e.g., Biesta, 2006; Olssen, 2006; Wolff, 2008). An obvious contradiction also exists between the purposes of environmental education and wider-ranging purposes of general education, namely to uphold the existing social and economic world order and to strive mainly for instrumental ends (Jickling & Wals, 2008; Stevenson, 2007; Wolff, 2007, 2008). Environmental responsibility depends on both complicated problem solving and ethical considerations and takes time in contrast to instruction having easily measurable structural tasks that are most common in daily school practices and other formal studies. Although value related reflections and discussions are slow processes, they can generate completely new views.

Nonetheless, Sterling (2001) and Tilbury (1999) claim that the educational process initiated in Rio de Janeiro has been too slow. Similarly, the Johannesburg

⁴³ Compare ‘negative and positive freedom’ described in Chapter One.

conference demonstrated that ten years of purposeful environmental work brought only marginally noticeable benefits to the environment (Pigozzi, 2003). The Johannesburg Declaration on Sustainable Development (2003) also expresses this in plain language in paragraphs 13-15:

The global environment continues to suffer. Loss of biodiversity continues, fish stocks continue to be depleted, desertification claims more and more fertile land, the adverse effects of climate change are already evident, natural disasters are more frequent and more devastating, and developing countries more vulnerable, and air, water and marine pollution continue to rob millions of a decent life.

Globalization has added a new dimension to these challenges. The rapid integration of markets, mobility of capital and significant increases in investment flows around the world have opened new challenges and opportunities for the pursuit of sustainable development. But the benefits and costs of globalization are unevenly distributed, with developing countries facing special difficulties in meeting this challenge.

We risk the entrenchment of these global disparities and unless we act in a manner that fundamentally changes their lives the poor of the world may lose confidence in their representatives and the democratic systems to which we remain committed, seeing their representatives as nothing more than sounding brass or tinkling cymbals. (United Nations, 2003)

As an attempt to use education to intensify progress towards a sustainable development UNESCO has launched the years 2005 to 2014 as the *Decade of Education for Sustainable Development* (DESD), a theme that is put on national educational agendas on many levels, from governmental policy to voluntary choice. The *Earth Charter* has been an important influence in the implementation of such policy (see The Earth Charter). Whether DESD can contribute something promising and long lasting to the educational arena remains to be seen since the project is still underway. As I have insinuated, strong contrary winds of many kinds seem to prevent a progress towards more sustainable life and instead promote opposing and contradictory social goals. An environmental concern that at least has stimulated planning and brought money to bear on environmental efforts is global warming. The effect of these efforts depends on many elements that call for quick action but is extremely vulnerable to political oscillations. However, whether the dilemma initiates change depends on mutual agreement. Yet, the UN's Climate Change Conference in Copenhagen in December 2009 is widely regarded as having been a failure. This

letdown did not awaken much hope for future negotiations. Instead, to protect economic growth, many agencies discover new opportunities to benefit from, for example, a huge expansion of nuclear power.

Many voices, of which I will only give a few examples, claim that the concept of sustainable development is not sustainable in itself and that its interpretation has failed (see, e.g., Gonzáles-Gaudiano, 2006; Holland, 2001). The concept has become a slogan or, as Ingimundarsson (1997) calls it, a magic word (*trolleord*) associated with several contradictory myths about nature. Gonzáles-Gaudiano (2006) also calls sustainable development a myth; yes, even a “salvation grand narrative” (p. 297). Being more like a parable than a concrete aspiration, it is easy to use sustainable development as a slogan in many fields—politics, business, all kinds of social planning and, last but not least, education (see Adams, 2001). The concept sounds simple, however grounded in deep conviction. Therefore, different stakeholders easily start to interpret it in completely different ways. Scott and Gough (2003) find a connection between the policies for sustainable development and lifelong learning: both are similar slogans that can give a false expression of substance or coherence (see also, e.g., Edwards & Usher, 2001). Wallgren (1990) criticizes the Brundtland report for glorifying economic progress and for having too much trust in the salvation power of technological progress, thereby forgetting the basic cause of the crises humanity faces, namely politics. Another aspect that Wallgren criticizes is that too much trust has been placed in instrumental reason, a claim that correlates with von Wright’s (1986) curiosity for the survival of humankind and his warnings against exaggerated belief in science and technology. Dorn claims that, “commonly understood,” sustainable development “simply means achieving long-run economic growth while preserving the environment” (Dorn, 2007, p. 1). Similarly, O’Sullivan accuses the Brundtland Commission for allowing us “to have our cake and eat it too” (O’Sullivan, 1999, p. 113). Furthermore, the three dimensions of sustainable development have been critiqued. Considering the economic sphere as its own dimension and not related to the social is, as Sauvé (2002) argues with very good reason, a sign that economic interest have come to dominate our current world.

The Brundtland report repeatedly suggests the need for political change, but the demands of consensus and resistance to radical change have led to paradoxical suggestions both in the Brundtland report itself and in the concrete politics that attempt to implement its message globally and locally (See World Commission on Environment and Development, 1987). Increased production and consumption

combined with equal possibilities for a good life are a difficult equation. Consequently, conflicting criteria cause basic contradictions and complicated circumstances that make sustainable development difficult to address effectively in education. Along with increased global environmental protection work, sustainable development has become an educational concern and has taken its place on the political agenda. Education has become a means to reach such sustainable goals but Sauv   (2002), among others, claims that a concept like education for sustainable development limits education to merely a *tool* for reaching sustained economic growth (see also, Hesselink, van Kampen & Wals, 2000). This means that Sauv   regards economic growth as one taken for granted aim of sustainable development, a presumed aim that brings the whole sustainability project into conflict with educational methods based on critique. Carr and Kemmis (1986) warn that viewing education as a process that strives towards particular ends fails to see how educational aims, policies and methods are strongly interconnected. And, Carr accuses the culture of modernity for being based on the pillars of “technologization and institutionalization” and for promoting “utilitarian and economic purposes” rather than “ethical activity directed towards morally desirable or socially transformative ends” (Carr, 2003, p. 15). Furthermore, he stresses how Plato’s *Republic* already took for granted that education can only be examined and understood as a part of society and that education and society are continuously being reproduced. So, a crucial question in the sustainability debate is how can education promote development other than what is supported by the society of which it is a part?

Concept Indistinctness

Today many researchers and educators are involved in a discussion about whether environmental education and education for sustainable development are equivalent or poles apart, and about which concept is more relevant. I will briefly show the diverging arguments by help of a graphic (Figure 1). Based on an Internet-debate Hesselink & al. (2000) describe four different ways of distinguishing the relation between the two concepts (1-4 in Figure 1). Tani, Cantell, Koskinen, Nordstr  m and Wolff (2007) present a version with six difference views of the relation. The intermediate views are that EE is a part of ESD (1) or, vice versa, (2), or that EE and ESD are partly the same thing (3), or that ESD represents a higher developmental

form in an evolving process where EE is a lower stage (4). In addition to these four views, Tani et al. present two extreme forms showing that EE and ESD mostly disagree (5) or that they are almost equivalent (6) (see also Hesselink et al., 2000; McKeown & Hopkins, 2003; Wolff, 2004).

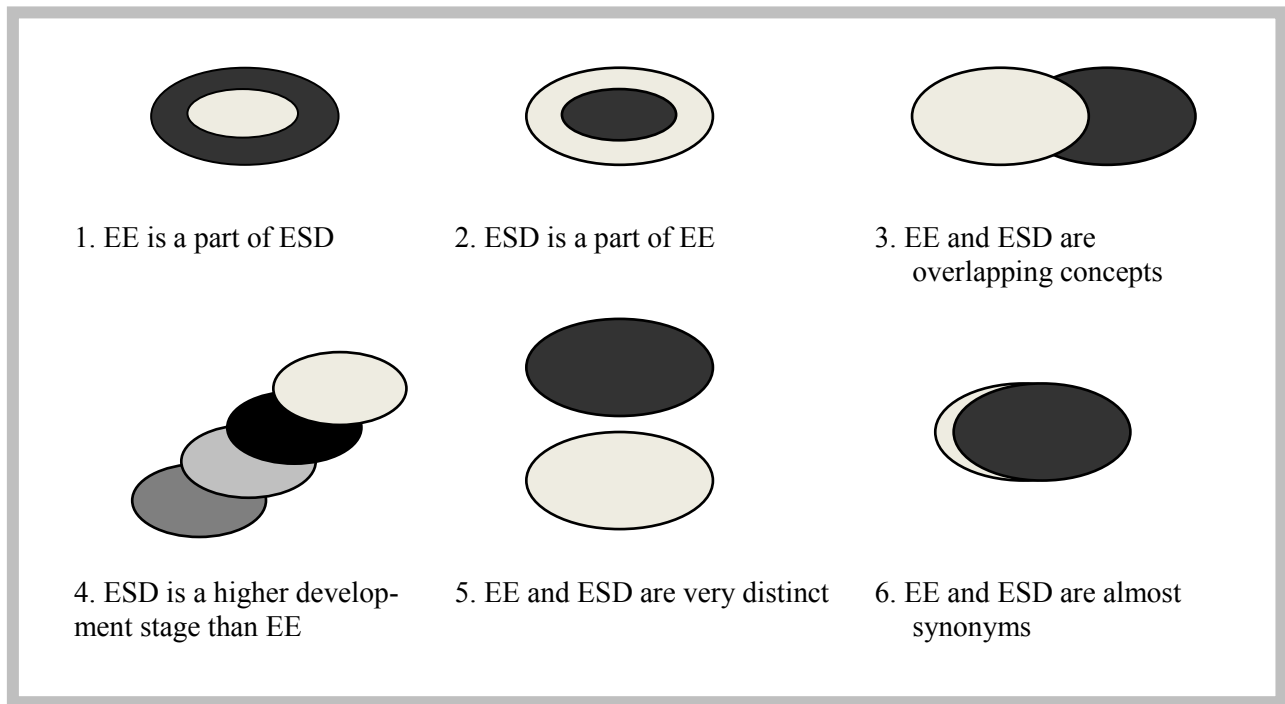


Figure 1: Six ways to describe the relation between environmental education and education for sustainable development (Tani et al., 2007, expanded from Wolff, 2004 and Hesselink & al., 2000).

Given that the concepts “environmental education” and “education for sustainable development” have more and more become the important educational issues of today, the incongruence in definitions certainly obstructs discussion.⁴⁴ As with Sauv   (2002), Jickling and Wals (2008) consider global agendas like sustainable development hazardous to implement in education. It is unlikely that an education aiming at sustainability can compete against the ‘market model’ in education, according to Sherren (2008), but she is still not completely pessimistic. Jickling and Wals (2008), on the other hand, are conscious about when education for sustainable development becomes business orientated. They do not recommend implementation

⁴⁴ I have participated in the discussion about the differences between environmental education and education for sustainable development in Tani & al. (2007). Many other researchers have discussed this difference, as well (e.g., Gonz  lez-Gaudiano, 2006); Jickling & Wals, 2008; Hopkins & McKeown, 2002; Sauv  , 1999; Stevenson, 2006;   hman, 2006).

of environmental issues according to business standards. Even if non-educators setting policy agendas and controlling funding easily accept these concepts, such agendas might turn out to be merely imaginary. Policies and standards resulting from the business and industrial world threaten dictating education for sustainable development, as is the case for many other aspects of education. However, standards, benchmarks and other control mechanisms might be the wrong manner of implementing value-laden issues. Nevertheless, bench-marking of the sustainability of schools and universities is a growing business. Education is not about teaching what to think but how to think, Jickling and Wals (ibid.) argue. One cannot compare the education of humans with the promotion of business profits and producing saleable commodities.

Contemporary Teaching Challenges

Although a quest for environmental education started around 40 years ago and much has happened since then, how teachers can fulfill the mission of promoting a more sustainable world is still worth discussing. Whether current educational systems can actually promote a more sustainable world is seldom considered, however. Environmental education focused first on nature studies, but it has gradually evolved to include social issues. Common concerns in strategies for education for sustainable development today are justice, equality, democracy, human survival and active citizenship.⁴⁵ Higher education has tried to emphasize liberal education, interdisciplinary, cosmopolitanism and civics (Sherren, 2008).

However, this widening of perspective only makes the educational task more demanding. The teaching of these issues is incredibly challenging, but so is common educational planning and curriculum work, and there are many value related obstacles. Educational institutions are not directly ready to adopt and promote new values and to make profound changes. This has especially become obvious in higher education (see, e.g., Bawden, 2004). The outcomes depend on the teachers, but also largely on the students; their backgrounds, views of the world, dreams, and so on, not to mention the conditions of the actual context where the education takes place. The entire educational establishment, including both physical and social environments and their political connection to the surrounding society, the state and diverse

⁴⁵ See UNESCOs website: <http://portal.unesco.org> (education, education for sustainable development).

counterparts, influence formal education. The list of influences on non-formal or informal education is limitless. Yet, education that takes place in many other contexts than formal education influences both children and adults. Dillon (2003) accurately accuses environmental educational research for ignoring basic learning theories and paying too little attention to learning that takes place outside formal educational contexts.

Jickling (2003) warns against presenting education as a *tool* for advocating the ideology of sustainable development. In the report *Our Common Future* (1987), Gro Harlem Brundtland already had said that teachers are to be the *tools* for achieving a sustainable development. The word ‘tool’ undoubtedly sounds instrumental; to make education or even human a tool is an ethically complicated prospect. The rhetoric relates to the shift of educational emphasis that Carr and Kemmis (1986) saw taking place in the middle of the 20th century when teachers became like workers in educational “factories” (ibid, p. 16) and the role of education was to maintain an academically designed curriculum. According to the tool metaphor, teachers have to work toward meeting a preset agenda. Yet, in the scenario Carr and Kemmis (ibid.) portray such curricula are programs designed to transmit knowledge as a social commodity that then becomes “capital.” Educators are turned into agents of the economic globalization agenda with sustainability as its basic standard (Jickling & Wals, 2008). Neither of these views gives the teachers a role as agents who reflectively promote both the ethical and intellectual development of students, and both views contradict a critical agenda. To discuss this issue, I will concentrate for a while on formal education.

Instruction has never been and will never be neutral and normativity is not only a curricular problem. When teachers teach about problems in relation to nature, environment or sustainability, the outcome depends on their own views of the world; beside ethics, these also include spatial and temporal aspects. Nobody can shake off the dispositions, values, and attitudes bequeathed by their backgrounds and frameworks. Curriculum, pedagogy, and assessment always reflect the teacher’s philosophical and theoretical position that, in turn, depends on assumptions about knowledge, human beings and the world. Various philosophical assumptions thus hide in instruction and, therefore, teachers need to become aware of their own relation to other persons, nature and environment, diverse cultures, economics, politics, and so on. As these relations vary considerably, a closer investigation actually shows that there are a plentitude of approaches to environmental matters and

sustainability in education. Every lesson depends on a choice: something is included and something else excluded. The individual aims of a lesson are diverse: some are partly obvious and others tacit. They merge both tacit personal and societal goals on many levels, in addition to the explicit goals stipulated by curriculums. Even if the teacher has personal motives for promoting particular environmental values, the educational policy may be a too powerful counterpart to change or struggle against. And in addition to large profound aims, there are also more practical and systematic aims that steer environmental educational praxis (see also Stevenson, 2007; Palmberg, 2000, 2008; Sund & Wickman, 2008). Due to intricate value conflicts, tremendous gaps between *aims* and *actions* exist both on the individual level, in society and in the field of education. Carr (2004) argues that education always has ethical implications and needs to aim at making people ‘better’. But, who decides what is better?

However, it is not only contradictions between guiding principles that cause problems; so do incongruence between *aims* and *knowledge*. If the teachers do not understand the theoretical background of, for example, climate change, they cannot advance students knowledge base in ways that facilitates or encourages proper actions. This has become evident in surveys in many countries (Palmberg, 2008). Misconceptions and limited knowledge about fundamental processes of nature complicates the teaching of controversial concepts like sustainability. Yet, as with values, the problem is that such knowledge is not definitive or value free. Scientific discourses are ruled by power and knowledge is, therefore, formed in accordance with a particular view of what the ‘truth’ is (see, e.g., Foucault, 2000i). Since empirical-analytical science produces technical recommendations but does not answer moral questions (Habermas, 1995), science becomes a technical power rather than a practical (moral) power that could engage conscious, reflective individuals.

Initially, environmental education dealt mainly with the natural world, but in the 1980s interest turned towards society. Thus human problems with the natural world became regarded as social problems and calls for systematic changes have increased accordingly (e.g., Sterling, 2004). One of the most drastic, O’Sullivan (1999, 2004), even suggests a radical break with the past. Promoting systematic change is, however, not easy in rigidly organized schools or other institutions. One problem is that the strict division of school subjects according to scientific disciplines does not serve broad, general issues like sustainability and makes it difficult for teachers to share responsibility for interdisciplinary topics (see, e.g., Kaivola, 2000). Since

sustainability is such a complex topic, its implementation requires shared responsibility among the teachers of all subjects. Another aspect often neglected when making decisions about educational aims is that the current generation of teachers may not have the knowledge about what kind of cognitions and attitudes the students will need in the future (see Klafki, 1997b). Klafki warns against making school education into a simplification of scientific knowledge; instead, his approach is to define contemporary “epochal key issues” (such as peace, environmental issues, use of technology, social justice, the role of media, and so on) as ways of presenting educational content in more universal modes (Klafki, 1997a, 1998). In addition, he strongly emphasizes the use of practical education and instruction that promotes critique, argumentation and empathy (Klafki, 1998).

Similarly, the cosmopolitanism in Kemp’s (2005) vision pays attention to key epochal natural, cultural and economical issues. Kemp’s visionary human beings oppose both extreme individualism and admiration of the state and, instead, they see the global community as the highest goal. Nevertheless, in this vision the educational goal is already set in the present. A crucial point in this debate is that gaps between knowledge and action do not reside only on an individual level, but arise in connection with social and political variables. As a result, the quest for change moves from distinct individuals to structural levels and to the need to transform entire systems. However, individuals build the systems at the same time the systems create the individuals.

Educational Research

Promoting an environmentally gentle lifestyle is not only accomplished through educational politics, planning and praxis, but also via educational research. Although, environmental educational research interests have changed and widened especially during the 1990s and the first decade of the new millennium, there is still a deep-rooted predisposition to normative solutions. Many environmental educational research projects have concentrated on empirical studies and sought answers about the circumstances that make a person act environmentally responsibly. Statistical analyses have quantified observable behaviors and thus have served as a foundation for so-called objective conclusions about implementing environmental issues in

education in ways that encourage others to change their lifestyles in accordance with environmental criteria (see Robertson, 1994).

Models and Normativity

Especially in the 1980s and 1990s, many researchers have constructed theoretical models showing which elements enhance environmentally responsible behavior (Hungerford, Peyton & Vilke, 1980; Hungerford & Volk, 1990; Kollmuss & Agyeman, 2002; K  pyl  , 1995). Their models try to overcome the gap between environmental knowledge and responsible actions, and they systematically propose how to form responsible citizens (see more about such models in, e.g., Cantell & Koskinen, 2004; Kollmuss & Agyeman, 2002; Palmberg, 2003; Robottom & Hart, 1993). A large meta-analysis (Hungerford & Volk, 1990) initiated environmental educational research that targeted environmentally friendly behavior, although the creators of the model never aimed at any practical application. The model starts from so called “entry-level variables” (sensitivity) through owner-ship variables” (in-depth knowledge and personal investment) and ends with empowerment variables” (environmental action strategies), and other researchers have followed this general outline. All such models thus build on a hierarchical order of knowledge and skills in coherence with Bloom’s renowned taxonomy (see Bloom, 1957), and they lean on the belief that certain instructional steps taken in the right order will change the students’ behavior and make them act more appropriately towards nature and society (see Chapter One). Such studies have had a major impact on the development of environmental educational research in many countries, and they still have (see, e.g., Ramsey & Hungerford, 2002), although critical voices were raised against environmental ‘behavior modification’ models from an early stage, among them Jickling (1991), Robottom and Hart (1993).

Basing their arguments on a large study of behavior modification models, Heimlich and Ardoin (2008) object to such behavior shaping in environmental education by emphasizing how extremely complex human behavior is, representing an intermingling of affective and cognitive processes. Their arguments do not address ethical aspects, but lean on psychology and studies of behavioral theories. They thus conclude that trying to change others’ behavior in a predestined direction is far too complicated to be manageable and predicable. Even so, even today researchers offer studies that aim at changing behavior (e.g., Ballantyne & Packer, 2009). Moreover, the aim of the Decade of Education for Sustainable Development is “to promote

sustainable skills and behavior, inspired by creative and critical ways of thinking, in order to encourage the resolution and management of problems that stand in the way of sustainable development” (UNESCO, 2005, p. 4). The route is thus determined and the educators’ task is to shape the students’ behavior to suit the predicted aim.

In combination with the call for critical thinking, the aim of promoting particular behavior becomes paradoxical. Jickling and Spork (1998) remind us that if people are taught to think, they may actually think for themselves and not adopt desired behaviors. Short’s (2010) aims of environmental education are quite similar to UNESCO’s. Environmental education “must ultimately serve the social function of transmitting knowledge, skills, attitudes, and behaviors that provide long-term benefit to the individual and community without bias against the sustainability of the supporting environment” (ibid., p. 2). In addition, Short points out that it is very important to evaluate the outcome of environmental education continuously in terms of the attained knowledge, and resulting awareness, critical thinking, action skills, attitudes, and behaviors. However, if ‘critical thinking’⁴⁶ implies a way of choosing between alternatives and not a way of criticizing educational frameworks and the students’ existing worldviews, the inconsistency diminishes between striving towards a particular aim and promoting critical thinking. Such criticism is, then, only an instrumental technique.

The construction of theoretical models can be effective, however, if they promote a better understanding of the complex relations between the numerous relevant elements in the educational processes. A model is, nevertheless, only a simplified picture of *some* of the elements that affect the process. It is an abstract trial to explain real situations and it cannot directly guide practice because it is not even possible to handle or know all the relevant elements. Although a model relies on empirical studies, it can never be complete. To know what the educational situation *is* does not necessarily give enough information about how it *ought* to be. Knowledge that something is wrong does not mean that it is ethically proper to correct it purposefully by manipulation. This simply means that knowledge about the existing situation cannot give exact knowledge about how to change the practice and formulate aims because there are too many elements involved that influence the outcome. In

⁴⁶ The concept of “critical thinking” does not necessary relate to “critical education” or “critical pedagogy” as based on critical philosophy. “Critical thinking” can denote a rational, reflective thinking strategy while “critical education” aims at the creation of a dialectic consciousness and promotes transformation (see Wolff, 2006a). Yet, even a critical approach can have a preset goal.

addition, even if a model seems promising it does not immediately give the educator a legitimate right to use it as a manipulating instrument since every model needs to be modified to suit its context and cannot serve as a blueprint for making students behave in a particular way.

Environmental education aiming at behavior change is not only taking place for young people in schools but also in adult education and information; thus it is a social policy that involves informal education situations using mass media, advertisement, and other kinds of informal educational media. Actually, informal education and advertising targeted at adults are growing businesses since sustainable development has become a marketing concept. Furthermore, the target is not only ordinary citizens as private persons but also various professional interest groups and business people from managers to employees; that is, it embraces entire companies and workplaces. Educational tools in environmental protection work that supplement command-and-control and market-based methods have emerged in the United States (Dietz & Stern, 2002), but also elsewhere. These tools strive for what they call a *voluntary* change of behavior; that is, to generate a change that not is forced by regulatory social methods. However, as Dietz and Stern state, the influence of market-based methods might be over-blown and more of a return to historical models than a new approach (ibid.). Market-based methods generally aim at someone creating profit by influencing another's conduct, although the manipulation may be well hidden. Behavior change through advertisement depends on skilful psychological methods and is, therefore, first class secret manipulation (see Schor, 2004). A voluntary change cannot take place under such conditions, but has to be built, instead, on maximally objective and diverse knowledge and with opportunities for a thoughtful choice.

O'Donoughue and Lotz-Sisitka (2002, p. 262), criticize pro-environmental behavior modeling from a social view. They point out the existence of "blind spots and blockages that persist in disallowing social politics and history to illuminate the complexities of human social habitus." They continue: "Factors and barriers on a flow diagram mask and 'factor out' much of the intermeshed complexity and diversity in the relational worlds of humans and other living things." Although education affects attitudes and values it does not instantly bring about changed behavior; learning is among other things related to context and circumstances (Palmberg, 2003). A Finnish study showed that even if young persons are concerned about the environment and have positive feelings towards environmental issues, and even if they say that they want to act on behalf of the environment, they will not

necessarily do so (Cantell & Larna, 2006). About half of the respondents⁴⁷ were interested in contributing to environmental protection and sustainability, but only five percent actually did. Lack of knowledge was not the problem; a gap existed between intention and action. They knew how best to act and wanted to, but still did not. Other researchers found similar problems in another large investigation targeting secondary school students in four European countries (see Miranda, Castells, Oliver & Cabral, 2004).⁴⁸ The students had knowledge about sustainability issues and they believed it was important to act, but they did not even *want* to take responsibility themselves but left it to others to act. Gender and social class differences also affected the answers, and most of the respondents had a very negative vision of the future. Therefore, Oliver (2004) calls for teacher training that deals with how to relate to sustainability issues as reflective practitioners and learning facilitators. Koskinen and Paloniemi (2009) warn that lack of encouragement or even discouragement may cause a motivated person to fail to act on their commitment to the environmental. Therefore, they point to the necessity of providing children and young people with adult support and companionship during the processes in which they learn to see themselves as social actors and users of power and develop their own action strategies.

Courtney-Hall and Rogers (2002) point out another wide gap environmental education has to overcome; the gap between the researcher and the researched. In the creation of pro-environmental behavior models researchers too easily regard themselves as external elements or masters managing others' change processes (ibid.). Simons et al. (2005) calls this researcher mode "pastoral," where the researcher as a critical intellectual is the one with both moral and technical authority who is trying to transform the objects of study (other persons). Attempts to change other peoples' behavior are like walking on a cliff's edge—the risk falling into the abyss is ever-present, and the only available bridge across it may turn out to be manipulation. The fact is that the more one tries to become aware of the gap between knowledge and action, the more new gaps one finds (see also Kevany, 2007).

⁴⁷ Cantell's and Larna's study included 1132 persons and a handful of them were interviewed. The young respondents had, among other things, discussed with their peers about global warming, vegetarianism, waste management, pollution, rain forests, and nuclear power. The questions the researchers asked in relation to conduct dealt with issues like conscientious consumerism, membership in activity groups, and participation in civic activities.

⁴⁸ The respondents of the survey were 1437 students from Portugal, Spain, the UK, and Finland. The questions dealt with social, ecological, and political topics and included a wide range of sustainability issues, global, local, and related to daily life.

Current Trends and Main Concern

It is obvious that it is neither possible to reduce environmental issues in educational research to merely methodological problems, nor can it be considered proper in educational praxis to simply train others to behave in a predetermined way. An environmental education that is strongly normative does not consider students to be autonomous persons with independent rights for choosing lives of their own. Researchers have gradually started to consider that environmental problems relate to politics, ethics and moral conduct and, therefore, education has to be designed to trigger the students' own thinking and judging (e.g., Jickling, 2001; Wals, Alblas & Margadant-van Arcken, 1999; Wolff, 2006a). However, ethics in education can be both a method and an aim. As a method, ethics activates students morally and encourages even unpredictable transformation; but if regarded as a narrow aim, educators can only transmit a particular ethical view. An educator creates a comprehensive picture of what a sustainable development ought to be and what the predicted end is that students need to reach. In contrast, if the educational model leaves the end indistinct, without any determined aim, the outcome becomes undecided and makes room for all the involved to formulate visions and jointly shape temporal aims and even to disbelieve the entire "sustainable development" aspiration.

Wals et al. (1999) see normative approaches as part of the problem instead of part of a solution and ask for new vehicles for researching the issue from the perspectives of life-styles, power relations, humans' connection with the earth and each other. In 1998, Palmer wanted to shift the focal point of environmental education research to the role of aesthetic and spiritual experience in relation to an individual's environmental awareness and concern. Drawing on several other researchers, she lists alternative approaches such as philosophical research, feminist critique, narrative inquiry, interpretive/historical research, case studies and action research. The last decade has initiated an obvious change of research methods in environmental education, perhaps thanks to increased political emphasis on environmental issues. The focus is moving from normative prospects to promoting common accomplishments. A growing number of researchers in the field of environmental education are interested in improving students' joint involvement and participation in authentic environmental activities and critical discourses, and in how to encourage people to take responsibility for environmental issues that directly affect their own lives (e.g., Koskinen, 2010; Lange & Chubb, 2009; Wals, 2006). Other new interests are bridge-building between various social groups and focusing on transformative

learning (e.g., Wals, 2006; Wolff, 2007). Environmental educational research focuses nowadays not only on children; higher education and adult education are newly growing targets. Furthermore, focus has spread from formal to non-formal and informal educational contexts.⁴⁹

While individual learning never takes place in a vacuum, Robertson (1994) sees environmental problems as social constructions. He asks, therefore, for critically-oriented, constructivist research concerning how people conceptualize environmental issues and the relationship between humans and the rest of the nature. In the framework of a project called MUVIN,⁵⁰ environmental educators in the Nordic countries have developed a strategy influenced by constructivist learning theories, strongly dependent on language and communication as tools. This strategy has “conflicts of human interests” as its target and an educational aim has been to promote “action competence” (Schnack, 1998; Lundegård & Wickman, 2007) by educating students about how to handle the dilemmas arising from the way human beings act upon the environment. This focusing on conflicts is based on the presumption that environmental problems and the difficulties with implementation of sustainable development are not due to the relations between human beings and nature but, rather, are about conflicts of interest between human beings.

According to Schnack (1998), such conflicts exist on three levels. A basic level includes conflicts between development trends and democratic aims that influence all humans. These kinds of problems are, for example, war, malnourishment, radioactivity, climate change and extinction of species, and they are similar to Klafki’s (1997a) key issues. On a second level are conflicts of interest between different stakeholders with different needs and desires, for example landowners and environmentalists. The third level contains conflicts of interest within a single individual. Somebody might want to travel fast, but also to save energy (Schnack, 1998). Lundgård and Wickman (2007) divide this action competence approach into three steps: (1) knowledge about the social and structural background of environmental problems; (2) ownership and a willingness to act; (3) concrete action. An important feature of this approach is that the students themselves initiate actions, not the teachers.

⁴⁹ See Chapter One in this book about formal, non-formal and informal education.

⁵⁰ MUVIN is a shortening of Miljöundervisning i Norden; that is, ‘environmental education in the Nordic countries’.

In Bonnett's view, education for sustainable development has to change focus from policy to a *state of mind* involving an idea of the human being's relationship to the rest of nature, where nature is an integral element of authentic human awareness" (Bonnett, 2002, p. 2; see also Bonnett, 2006, 2009). Sustainability itself then takes on new meaning and is no longer a mode simply for the human utilization of nature; rather, nature is something living for its own sake and needs "to let be". An education in line with Bonnet's thoughts concentrates on ethics as a practical undertaking (morality), but it leans on a different metaphysics. It is an ethics of receptive response to the natural world instead of rules; and, in opposition to a strongly rational approach, Bonnet seeks a more intimate, intuitive and sensuous encounter with nature.

The state of mind Caduto (1998) and O'Sullivan (1999) seek goes still further and includes clear spiritual dimensions. This approach bears features of the native North American tradition and treats environmental ethics and social justice as inseparable. Caduto actually calls for a life ethic valuing nature and humankind equally. Schultz (2002) emphasizes the need for inclusion in the natural world, and sees a need to make people experience that they are part of nature, not above it or controlling it. Bonnett's, Caduto's, O'Sullivan's and Schultz' positions are not similar but they all, as do I, strive to re-establish the natural world on the educational agenda. Since the early 1970s, several empirical studies in environmental education have confirmed that a crucial base for environmental engagement by adults is a history of pleasing nature experiences in childhood (see, e.g., Palmer, 1993, 1998; Chawla, 1999). A large empirical study performed by 30 researchers from 12 countries and six continents showed that educators engaged in environmental education listed pleasant experiences in nature as the most important element in their interests. In Australia, Canada, South Africa, and the UK, childhood experiences had greater relevance for educators' engagement in environmental issues, while educators from Hong Kong, Sri Lanka and Uganda mentioned experiences of the natural world as adults as influential for their commitments to the environment (Palmer & al., 1998). So many studies indicate the importance of positive experiences of the natural world as a basic element that triggers motivation for environmental issues that this variable should not be neglected.

In, About, and For

Since the Stockholm Conference 1972, the programmatic aims of environmental education have been distinguished as education *in* (or *from*), *about*, and *for* the environment (e.g., Palmer, 1998). The preposition *about* draws attention to cognitive aspects of education, such as skills, knowledge and understanding; *in* recognizes the education taking place outside the school in authentic surroundings; and *for*, in turn, aims at purposefully developing attitudes and environmentally friendly or sustainable behavior (Scoullos & Malotidi, 2004). Ever since the Tbilisi conference, educational policy documents have emphasized education *for* the environment—a trend that goes hand in hand with the empirical research approaches described earlier in this chapter.

Advocates in the environmental educational field have, however, objected that talking about education *for* the environment might actually be an overly narrow approach. For example, Jickling and Spork (1998) argue that despite the usefulness of these characterizations and their benefits in the development of environmental education, it may be dangerous to depict education with the help of the preposition *for* something, meaning with a clearly envisioned end. Ten years ago, these researchers already had suggested revising talk about environmental education and advised teachers to abandon their most fixed visions for the future and instead to focus on challenging students to create their own visionary views (*ibid.*). Nevertheless, the newer concept of education for sustainable development still contains the directional preposition *for*. Jickling and Spork even stress that “when ‘education for the environment’ is defined programmatically there is a tendency towards narrowing of perspective, limiting of possibilities, anthropocentrism and militating against the evolutionary tendencies of environmental thought” (*ibid.*, p. 11). However, many researchers have also defended the word *for* as crucial stressing that education needs to empower individuals and encourage them to transform society (Ferreira, 2009). I will go further and discuss whether or not *for* serves as an empowering focus.

In the discourse on education for sustainable development, the small word “for” makes sustainable development an aim. Nevertheless, Tilbury (2004) wants sustainability to become a process more than an aim or end-result and hopes that what she calls “environmental education for sustainability” (*ibid.*, e.g., p. 97) can be a force for cultural change on many educational levels. Sustainable development may become a disputable educational issue, however, if the whole ‘sustainability project’

strives towards a *universal* goal. As such, is it easily seen as the singular truth, and the only right and successful education is then ‘normative’—an education that strives towards the pre-set grand goal or, in Ferreira’s (2009, p. 609) terms, “an orthodoxy” aiming at social change through empowerment of individuals. However, even if from the very beginning there is an immanent problem in the sustainable development concept and the entire idea about it, this does not necessarily hinder sustainability from becoming a re-creational process and a flexible metaphor that can be constantly discussed and reshaped. According to Tilbury (2003), a concrete and universal definition of ‘sustainable development’ as well as ‘education for sustainable development’ contradicts the key premises of sustainability as a working process. Instead, she argues that “fuzziness” (ibid., p. 33) arises in discourses and this has definitely happened. What is then the big difference between having universal or particular goals? This question leads us to the discussion of ethics, and below I will briefly describe today’s three most fundamental ethical positions.

Ethics as Consequence, Duty, or Virtue

One focus in this book is ethics, but ethics is not one, but a diverse issue. Our daily actions as well as economics, politics and education all lean on ethical principles of some kind, whether consciously or unconsciously chosen. The ethical principles a person adopts are a result of many social experiences and lessons. Ethical conduct is seldom an exact implementation of ethical theory, but modifications of many theories. Still, it is useful to be aware of basic ethical theories and their consequences when discussing education in general, but also as regards environmental education. The three ethical outlooks or theories of ‘right action’, I will summarize below are *consequentialism*, *deontology* (duty ethics), and *virtue ethics*.

To begin with, I will turn back to the preposition *for* once more. Carr (2004) emphasizes the difficulty with the preposition *for* in educational philosophy, because it can be used both instrumentally and non-instrumentally. One reason for this merge is the influence of *utilitarianism*⁵¹ that is both an instrumental and non-instrumental theory, according to Carr. Utilitarianism is a common view of *consequential ethics* (consequentialism), a theory that values actions on the basis of their consequences.

⁵¹ Jeremy Bentham and John Stuart Mill are known as the developers of utilitarianism. There are many forms of utilitarianism, but I will not go further into this subject here, only note that a basic distinction is between act and rule utilitarianism.

Beside that, utilitarianism also values ethical actions from a welfare perspective. Consequentialism⁵² makes morality calculable, because an act is regarded morally right if and only if the difference between the total of benefits (positive values like advantage, pleasure, good, or happiness) and the total of negatives (negative values like mischief, pain, evil, or unhappiness) of the act is greater than the outcome of some other available act (see, e.g., Anscombe, 1958; Mulgan, 2001; Pojman, 2009). According to consequentialism, education *for* sustainability is defensible if it is an act that brings the greatest good for the greatest number compared with other alternatives (“biocentric ethics” also include other parts of nature than humans in the greatest number), not because this education is a good thing in itself. However, instead of being only extrinsically good (for some instrumental reason and good for somebody), the act can also be intrinsically good (good in itself). Attfield (2003) emphasizes environmental education both because of its ends and as an act. A trend towards a good education both for its own sake and for its ends is to combine environmental education with “quality education.” This combination has especially been stressed as important when implementing environmental education in poor countries.

Utilitarian ethics or consequentialism is good because it offers simple and useful principles, but many theorists have raised objections to the theory. Pojman (2009) lists five unfavorable arguments against utilitarianism because it:

1. makes the choice too demanding (the no-rest objection);
2. makes the choice between methods too complicated if there are two good choices (the absurd implication objection);
3. it is difficult to put another’s goals against one’s own and this leads to alienation (the integrity objection);
4. it is against equality because it strives for the greatest good for the greatest number, and not good for all, and a few might have to be sacrificed on behalf of the majority (the justice objection);
5. is a conflict between common rules and the greatest utility in particular situations (the publicity objection).

Viewing both education and sustainability from this critical view, there is a problem with knowing what goal is the best, and this brings forward a new utilitarian problem: how to choose between present and future goals. People do not necessarily want to learn how to act on behalf of the environment only because of its promise for good in

⁵² Consequentialism is often used as a synonym for utilitarianism.

a far future, if the education is not also meaningful for its own sake here and now. Even if the education is concrete it may not help, for example, teaching recycling, sustainable consuming and other environmentally responsible actions. It also may not motivate either teachers or students if the only reason for doing it is the long-term aim. Another problem is that the aims are often in conflict. When technical educational aims (instrumental goals) are blended with moral aims (non-instrumental goals) this confuses those who have to act in the educational arena (Carr, 2000). The same happens when technical and economical goals are blended with the appeal for sustainability, a goal that is strongly related to morals. In education, either the choice may be between delivering advanced communication technology to enable equal possibilities for discussions all over the world or of putting the same money to work helping people build their own infrastructures for gradually eliminating starvation. Both ways may raise poor people's confidence; the question is, however, what alternative they prefer and why? From the sustainability perspective, two conflicting goals may be either to eliminate illnesses by using pesticides, or to let people die to avoid pollution followed with damage to nature and new human diseases. Would these problems disappear if the whole world followed the same rules?

An anonymous article in *Connect*⁵³ from 1991, articulated in the framework of the UNESCO-UNEP International Environmental Education Programme, IEEP, presents a joint search for a universal environmental ethics that through "sensibility and conscience, can draw the individuals in the direction of that ultimate goal of environmental education, namely, environmentally-ideal personal behavior" ("A universal environmental ethics," 1991, p. 1). Moreover, this article emphasizes a common environmental ethics based on various religious beliefs that could be developed in collaboration with cultural custodians, priests, rabbis, mullahs, scholars and environmentally aware religious and secular educators. This proposed ethic combines cultural and religious values with knowledge about life processes from contemporary biological and environmental sciences. Thus an old Enlightenment idea about universal ethics is reawakened as an aim of environmental educational debate in the 1990s (see ASP; Kant 1795/2005).

Kant (1803/1900) had a vision of a universal *duty ethics* (deontology) and argued that education has to promote the happiness of all humankind. When he developed Rousseau's ideas about individual freedom, Kant saw autonomous will (*free will*) as a

⁵³ UNESCO-UNEP Environmental Education Newsletter.

means for individuals to follow rules (duties) they set up for themselves. According to Kant (1785/1997), freedom is then obeying one's own rules and mastering one's desires with the help of reason. Kant not only addressed individual autonomy but also collective freedom. He meant that a community is autonomous when it sets up its own laws in accordance with the will of its members so that they apply to a *general will* (Kant, 1785/1997, 1788/2002). In the *Groundwork of the Metaphysic of Morals* Kant ambitiously worked out the highest moral principle, the *categorical imperative*⁵⁴ through which he searched for the highest standard of moral conduct: "act in accordance with a maxim of *ends* that it can be a universal law of everyone to have"⁵⁵ (Kant, 1797/1996, p. 157). He also made autonomous will, *self-government*, the foundation for this standard (Kant, 1785/1997, 1795/2005). Kant's ethics trust humans as rational, moral creatures endowed with reason as means for making duty rule over the will and overcoming selfish desires. The universal rules Kant proposed were the same for everyone because all humans are rational beings. Thus they have to treat themselves and others as rational beings—not as means, but as ends in themselves. If one undertakes every action with the presumption that it could be a general duty there will always turn up situations where this principle is impossible to follow. Thus, "duty ethics" is a beautiful vision suited to a perfect world; but the world is not perfect and humans are neither similar nor always rational. Nevertheless, Kant's ethics can serve as a high standard for encouraging people to lifelong ethical self-improvement.

The third ethical line I will describe is *virtue ethics* that originates in the writings of Aristotle, and that I already discussed in Chapter One. Aristotle created a practical ethics suitable for a rational creature living an active and normal human life with work, friends, and families. According to Aristotle's ethics, the perfect goal is the one that is good in itself and which humans choose for its own sake, not because of some other goal (see *The Nicomachean Ethics*). Happiness is such a goal and another one is freedom. Yet, it is not a question about a solitary freedom, but a social one; good persons are good towards each other. Virtue for Aristotle, is a middle ground between two dichotomous options. Too much and too little are both unfavorable. Too much braveness, for example, is 'arrogance' and is equally as bad as the 'cowardice' of too

⁵⁴ Kant called the *categorical imperative*, a practical law and a basis for all other individual moral laws. In another version it reads like this: "A human being, however, is not a thing, and hence not something that can be used merely as a means, but must in all his actions always be regarded as an end" (Kant, 1785/1997, p. 38).

⁵⁵ The italics are original.

little bravery. The intermediate, the ‘mean’, is therefore always the best choice. However, if the act exhibits a vice, such as envy or malice, there is no intermediate option. Virtue is of two kinds: either intellectual or a matter of one’s character. Intellectual virtue is a result of education, and requires experience and time, whereas moral virtue or virtue of character is a result of habits or upbringing (ethos). When practicing justice, generosity and other good actions, one develops a good or virtuous character, according to Aristotle. Therefore, virtue is something one acquires, because only the *inclination* to virtue is inborn. Virtue is a kind of decision to be good, an ethos that rules one’s actions. It is not easy to be good, and it is thus delightful and praiseworthy. Virtue ethics makes environmental issues into problems that everybody has to deal with in daily situations, in the kitchen, bathroom, shop, car, and whenever we are and have to make big or small choices. It builds on considerations and decisions in which both reason and emotions are allowed to have their say. Viewed from a virtue ethic perspective, sustainability becomes a lifestyle, an ethos.

Consequentialism can sometimes help us to decide between conflicting options, deontological arguments help us to see larger obligations, and virtue ethics is good in regard to everyday life situations. Beside the three ethical alternatives presented above there are also many other theories, and among them are the feminist and deep ecological theories that I will discuss later in this chapter. All these theories have advantages and disadvantages, and it might be difficult to follow the same doctrine consistently. However, it is also problematic to make difficult decisions without any guidelines. A *relativistic* stand is not to hold what is right or wrong, good or bad, true or false as any absolute standards, but as flexible, and thus depending on culture and situation. Nevertheless, there are basic global problems in need of definite ethical rules that could guide us to not get even more lost than we presently are when it comes to equality, survival and caring for the planet.

To Change or not to Change

I will now return to the position advanced in Chapter One that schooling has not managed in tackling environmental problems adequately. After surveying articles and conference proceedings in the field of environmental education, Palmer (1998) criticized the research for lack of rigor and for uncritically presenting success stories. A decade later, Cutting and Cook (2009) note the same problem. Cutting and Cook

base their claims on a study of more than 160 papers presented at the World Environmental Education Congress taking place in Durban 2007 (WEEC 2007). Contrary to the paper presenters that showed positive results, many keynote speakers pointed out the large scale lack of success and called attention to the fact that a generation of environmental educational work has failed to prevent global economic, social,¹ and environmental crises, and that these problems even have grown worse (Cutting & Cook, 2009). That such problems have increased is no overstatement: after the failure of the UN's Climate Change Conference in Copenhagen in December 2009, environmental problems are more obvious than ever, and about 40 years of environmental education have not shown any radical change in how humans treat the environment. Yet, success stories concern short term results of small projects; they are apparently not focused on worldwide change. If the world has not seen any improvement in its unsustainable actions, this cannot only be blamed on insufficient environmental education. However eager and purposeful environmental education has been, it offers only marginal input over a short time span. Remedying ills that have developed over hundreds of year, maybe even longer, is no easy task. Even if it is crucial, environmental education is a marginal educational issue competing with a myriad of other educational interests. It cannot alone change the course of the world. At a practical level, this educational field is still in its cradle and so is its supporting research.

Initially, people involved in the development of environmental education spent much time formulating aims, creating vocabulary and arguing about concepts. The preposition *for* has been problematic for years, because it brings instrumental associations into play. Many other terms used in the discourses, such as “democracy”, “citizenship”, and “empowerment” and, last but not least, “sustainable development”, are taken for granted as self-evident rather than critiqued (see also Wolff, 2007). Despite much effort, the attempts to make teachers change the world has been the lodestar for many stakeholders and the meager results makes it look as if the current situation is a failure. Environmental education was implemented with an attempt to change the world by changing attitudes. Both research and practice neglected the problem that it is impossible to make people change against their own will without forcing or indoctrinating them. Consequently, environmental educational research did not discuss how to deal with value-based concerns such as ethics and policies. However, researchers in the field have now gradually started to emphasize these perspectives. Power and values are involved in all human undertakings. Thus, the

choice of lifestyle is not solely an individual's own personal option; the cause for the choice is to be found at many levels and, as a social system with an obvious impact, education is also involved. People's relation to nature and the idea of a sustainable future is wedded to many social dilemmas; for example the conflict between local and global. On the one hand, a strong wind blows towards globalization while, on the other hand, there is a call for values like participation and pluralism that are much easier to promote in smaller communities.

Eager environmental activists have tried to act rapidly on a slowly changing educational arena and have used methods that suit politics and social activism better than education. Even if the state of the world is unsustainable, giving up is not an option; new directions must be sought. Nevertheless, forcing others to live a life according to the principles of sustainable development or any other principles can never be an appropriate method for long-term change. Instead of focusing on changing individuals, humankind might have to make more radical changes. What, then, are the educational options? Can education be a tool for changing the path of protecting the environment or is such an undertaking hopeless? On one hand, it might be worthless and dim-witted to reflect on whether anyone has the right to educate others to take care of the earth in a situation when it is obvious that humankind risks steering the world to destruction. If people do not want the species to survive, then the species is less instinctively equipped for survival than other animals. But, astonishingly, that may be the case. I will leave this possibility open for the moment and instead reflect on how the human species has arrived as such a dangerous state. The second part of this chapter will try to answer that question.

2.2 Whodunits: The Search for Scapegoats

What are the sources of environmental problems? This question has many answers, since there are many reasons offered for why humans' relation to nature has become so troublesome. It is almost impossible to list all explanations for why humankind has entered this situation, but I will identify some possible answers, both typical and rare, and will comment on them. The focus of attention will thus move towards education from a philosophical angle, and the philosophical arguments will confront non-philosophical stances, as well. So, the whodunits story can begin.

Christianity as the First Suspect

When agreeing that environmental problems are at least partially a result of socio-ethical consequences, one can start reflecting on the kind of obstacles that underlie human beings' increasing problems in relation to nature and the environment. There are many explanations for such problems. To begin with, there is a common notion in environmental philosophy that the ecological crisis is rooted in *Christianity*, entwined with *Ancient Greek philosophy*, especially the ideas of Plato. Environmental philosophers have often blamed the development of science and technology, including a lot of negative impact on the environment from the originally Christian—and increasingly globally extended—idea of human beings as 'the crown of creation'. With humans seen as the pinnacle of God's creation, they are granted the moral right to utilize nature however they see fit (see, e.g., Attfield, 1994; Belshaw, 2001; Suutala, 1990).

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that crept upon the earth. (Genesis 1: 26, King James Bible)

In particular, White (1967) accuses the Old Testament for rejecting nature's holiness and promoting the human right to domination over the natural world. The Renaissance and the Enlightenment were eras that fomented change in the relationship of humans to nature, according to Belshaw (2001). In Renaissance thought, human superiority over other creatures followed two lines; on the one hand, the human being was regarded as a godlike creature and, on the other hand, as God's knight (Suutala, 1990). Both visions allowed humans to control the rest of the nature. Nonetheless, through the entirety of Western history there have been both defenders of and antagonists to the idea of human superiority over other creatures (e.g., Attfield, 1994). The same variation exists in received opinions about how humans are allowed to treat other animals. As I will show in Chapter Four, this was a common discourse topic in the 17th and 18th centuries and not only included animals, but also plants and minerals.

The problems do not necessarily disappear when denying the image of a divine Creator organizing His creation in a strict order with human beings on top as the most advanced and rational of all creatures. Controversially, or maybe more because of a

long Christian tradition, even human beings without belief in any creator can start to take on the Creator's role themselves. More and more sophisticated bio-technologic experiments with genetic material and technologizing of the human brain⁵⁶ in so called cutting edge research makes it look like high-tech human beings have taken on the roles of deities themselves these days. However, the Christian message can also be interpreted in another way with another influence on how human being treats nature. In this contrary version, concern for nature and other species is the direct outcome of Christianity's pastoral matrix and human beings as 'God's copy' take on the role of a vice-shepherd for the rest of the creation instead of taking on an oppressor's role. In addition, the altruistic message in the New Testament can in turn also endorse equality among people.

Clark (1997) rejects the idea that Platonism and the Abrahamic religions⁵⁷ strongly influenced by Platonism are the scapegoats of environmental problems, and he insists that it was the Platonists who called attention to humans' obligations towards other creatures (see also Attfield, 1994). Plato and Aristotle regarded human beings equal to other parts of nature, according to Suutala (1996), who instead accuses the Romans for putting humans in the master position. Yet, Plato's view of the body and the soul is very different from Aristotle's. In Plato's dialogue, *The Statesman* (271e-272a), a shepherd god was watching over the first humans who in turn watched over the other creatures, and all lived together in peace. Nevertheless, no one can deny that the natural world is a rare topic in Plato's writings and that human beings, especially their souls, are the main concern; however, the whole cosmos has a central place in the *Timaeus* dialogue.

Among many post-Aristotelian philosophers and Neo-Platonists, 'nature' came to play a vital role. In particular, the Stoics saw the goal of life as harmony with nature, but they regarded humans as different than non-rational animals (Carone, 2001). From this, it does not logically follow that humans, despite being intelligently superior to other animals, have a right to utilize the rest of nature for their own purposes. Björk (2000) emphasizes that the Hebrews never divided creation into any subject-object relation but, instead, saw the two as interrelated. The human relation to others, the natural world, and God was a contract based on loyalty and trust. 'Faith' was a life-supporting verb, an activity, but the Hebraic thinkers prioritized humans

⁵⁶ Technologizing of human brain implies brain engineering, e.g., implantation of silicon chips in individual brains.

⁵⁷ The Abrahamic religions include Judaism, Christianity, and Islam.

and their relation to God over their relation to nature (ibid.). Obviously, according to the Ancient philosophers and the Bible, the way humans relate to the rest of nature can be interpreted in several ways, and can suit opposite purposes. These questions are difficult and need further study. Since Lynn White 1967 blamed Christianity for the ecological crisis, ecotheology has been a growing research field worldwide. The ecotheologists try to protect the exploitation of nature and to shape an understanding and willingness to prevent environmental problems using scriptural arguments.

Obviously, Christianity is not the only religion, and other places in the world having other religions have followed other lines of development. Yet, is there a connection between religion and technical and economical development? China, which once was at the forefront of technical innovation, is an example of a region without a strong Christian tradition. This example illustrates the difficulty of using Christianity as a scapegoat for environmental problems. A comparison between Europe and China actually show both certain similarities and differences regarding treatment of the environment. China's main religions, Confucianism, Taoism (Daoism), and Buddhism are more like philosophies, but this fusion of religions did not prevent achievements in technological development before Europe. During the classical era⁵⁸ Chinese philosophers, especially Taoists, criticized hierarchical attitudes towards nature (Holm, 2003; Lai, 2001), but there is a diversity of Chinese views of nature (Elvin, 2004; Lai, 2001). A typical Chinese notion is a creator who constantly reshapes the cosmos. The resulting relation to nature is a mixture of utilization and love (Elvin, 2004). Chinese society has a strong tradition of rituals and powerful leaderships linked mainly to Confucianism values and practices (Holm, 2003; Roberts, 2007). As with Christianity, one can blame Chinese religions-philosophies for both promoting and not promoting sustainable utilization of nature.

It is frequently overlooked that many discoveries and ingredients essential for industrial development were originally Ancient Asian and often Chinese (see Diamond, 1997; Goody, 2006; Musgrave, 1999; Roberts, 2007). China was initially a leader⁵⁹ of technical development; with pressure on the environment most certainty higher than in Europe. But Chinese industrialization slowed in the 18th century while European jumped to the forefront with the Industrial Revolution (see Diamond, 1997; Elvin, 2004; Musgrave, 1999). The Chinese did not re-join the race until the 1980s,

⁵⁸ The classical era of Chinese philosophy took place about 600 BC to 200 BC.

⁵⁹ In the 13th century, there was no European technological or industrial invention unfamiliar to the Chinese people. The Chinese invented the compass, the art of printing and gunpowder (Sörlin & Öckerman, 1998).

after Mao Zedong's death⁶⁰ rejects any Christian influence on Europe's so-called "Scientific Revolution." Because Christianity flourished in the entire Mid-Eastern Mediterranean area, and the Old Testament has a partly nomadic and Semitic background, he does not even count Christian values as typical European. He also argues that it is Eurocentric and occidental narrow-minded to stress the development of Western 'civilization' as superior to human progress in other parts of the world. He maintains that, although there are differences between east and west, there has not been any radical discontinuity between the development processes of Asia and Europe. A similar development took place throughout Eurasia at the time in west of much appreciated Greco-Roman antiquity and, since then, development has fluctuated, but not as much as European historians often want to claim (ibid.). Between 1000 and 1450 AD science and technology came to Europe from the Muslim countries and, at that time, China had a vastly developed technology (Diamond, 1997).

According to Diamond (1997), China lost its political and technological lead to Europe because of politics. He argues that it was advantageous for innovations to find ground in a Europe that consisted of many small principalities and states in contrast to how easily leaders could impede improvement in a large, united China (see also Roberts, 2007). Europe had an advantage in the 17th and 18th centuries because of corporate organizational frameworks and financial structures. However, neither European technology nor goods were superior to the Chinese, not even the quality of production methods (Musgrave, 1999). However, these explanations are but partial explanations of a complex phenomenon, and Diamond's argument in particular is not convincing enough, despite his points about the difference between a geographically split Europe and a united China. In the 18th and early 19th century, China suffered from serious floods, and this may have caused the large-scale clearing of forests (Marks, 1998). During the 19th century, the political situation there was unstable because of both internal conflicts and foreign invasions, and the beginning of the 20th century was very turbulent. Conflicts and the financing of wars, state as well as regional policy, land use and landownership, cultivation methods and industrial technology, leadership, and so on, are all noteworthy elements that had an effect on industrial achievements and environmental conditions (see, e.g., Elvin, 2004; Marks, 1998; Moulder, 1977; Steingart, 2008). In China, a huge population and massive

⁶⁰ Mao Zedong died in 1976.

irrigation systems affected development, and notable trade and articles for consumption, such as silk, rice, opium and tea, played remarkable political roles that even put China under Western control.

Although Europe had once passed China in the scientific and technologic development race, today China struggles with huge environmental problems, much greater than Europe has ever had. No ways of reaching the world's economical top position are small in the China of today, according to Steingart (2008). Nothing resembling the rapid Chinese industrial development has taken place anywhere else since the 19th century European industrialization. At the cost of despoiling nature and the suffering of millions of child workers, China pays its price (ibid.). And Christianity cannot explain the Chinese example.⁶¹ Communism is an atheistic ideology and, besides religion, elements such as politics, economy, population dynamics, cross-boundary movements of goods and people all influence development. Thus, many other human factors have an important impact on how humans treat nature. Not only humans, but also physical fundamentals and barriers have regulated the spread of innovations in earlier times and China, like the Fertile Crescent, had the great advantage of positive agricultural conditions (Diamond, 1997). In conclusion, from the very beginning, the successes and failures of industrialization have been an intricate process with a changing focal point and can not be directly blamed on Christianity. Nonetheless, neither Christianity nor other religions can be regarded as completely above suspicion, but it is more a question of how religious texts have been interpreted than of following clear religious values. I will return to this point at the end of this chapter and in Chapter Four, and will again discuss the issue once more in Chapter Seven.

Dualistic Splitting and Biases

It is also possible to consider the foundation of the environmental dilemma as *dualistic biases*, because it is well-known that humans have a tendency to split their conception of the world into two opposing aspects or elements. One of the oldest and best-known dichotomies is the Taoist distinction between yin and yang, symbolically pictured in black and white. The yin-yang dichotomies are not completely distinct; they are searching for harmony in a constant, mutual transformational process, while

⁶¹ As a modern Western phenomenon, communism of course includes Christian values.

other opponents are more stable and apart. Other opposites are good-bad, virtuous-vice, reason-emotion, body-soul, male-female, Western-Nonwestern, developed-undeveloped, and human-nonhuman.

Gender

The *gender* split is a dualism that has come to attention in discourses about the environment and as linked to human utilization of the natural world. Yet, the image of women is not definite but shifts according to time and location. In Western thinking, the image of women has been both positive and negative: on the one hand, a positive image of a fertile Mother Earth or a virgin nymph delivering peace and serenity, on the other hand, a negative image of an evil being who brought plagues, famines, and tempests (Merchant, 1980). Plato had already regarded men as superior to women (e.g., trans. 2006, *Timaeus*, 91). A strong negative female image during the Middle Ages and Renaissance was the witch. She was a symbol of evil in nature; she was a chaotic feature that needed to be controlled (ibid.).

Eco-feminism or “ecological feminism” is a broad term for several perspectives that emphasize a connection between the suppression of (especially) women, but also children and other groups, and the suppression of the natural world (Plumwood, 1994; Warren, 1994). Fraçoise d’Eaubonne first introduced the term “eco-feminism” in 1974, and called for an ecological revolution to address both the oppression of nature and gender biases (Warren, 2000). What on a whole distinguishes eco-feminism from non-feminists views of humans’ interference in nature is that ecofeminist ethics is based on the assumption that there are similarities between the domination of woman and of nature and, ecofeminism is, therefore, a critique of diverse social systems of domination (e.g., Warren & Cheney, 1991). In ecofeminist studies historical, religious, literary, political, ethical, and epistemological perspectives are relevant (Warren, 1994). *The Rio Declaration* pointed out the role of women in environmental management and development and *The Johannesburg Declaration* stressed empowerment of women and gender equality in the work for a sustainable development (Gough, 2004). Moreover, the UN has appointed women to key positions in the management of natural resources (Elmhirst & Resurreccion, 2008).

The ecological feminists’ critique of Western cultures calls attention to *value dualism* that, in addition to feminine-masculine, includes value-pairs, such as reason-

nature, mental-manual, civilized-primitive, and human-nature. Men mostly control scientific knowledge, while women's knowledge is considered useless and even dangerous, according to Davion (2001). Plumwood (1994) connects the oppression of nature to Eurocentrism, colonialism and a habit of treating indigenous people as 'primitive' and sub-rational. While women's skills, values and needs are ignored in most cultures, sexist language, media and science contribute to regarding males as superior to women, according to Winter (2002), who drastically draws a line from gender biases to poverty and overpopulation that ends up in environmental destruction. However, new eco-feministic perspectives connect nature to social and political relations and thus analyze contexts instead of focusing on differences between men's and women's environmental engagement. Instead of a focus on men versus women, issues such as nature management, environmental problems, and gender biases are put in the framework of neo-liberalism and thus globalization, trade liberalization, and social reproduction (Elmhirst & Resurreccion, 2008). This does not do away with the topic of gender bias vis-à-vis nature, but puts it in a broader, more wide-ranging power complex. In addition, gender is becoming a more flexible concept, where the attributes of being 'female' and 'male' are not so distinct anymore.

Soul and body

Gender-specific attributes also apply to the *soul-body dualism* often seen as rooted in a Cartesian⁶² splitting of mind from body. Historically, the sensing body is bound to an idealist tradition that, since Plato, has given the mind higher priority than the body; more exactly, knowledge derived from reason has been held to be higher—more universal—than sensory knowledge. While René Descartes was a substance dualist, who saw the body and soul as two distinct substances, Plato thought the body was a negative copy of the divine and immaterial soul. Plato describes a myth about the creation of the world in his dialogue *Timaeus*, and in this myth the soul is the ruler of the body (*Timaeus*, 35a; see also, *Phaedo*, 106-116). According to Plato the body hinders humans from thinking. Bodily sensation disturbs the attention of the soul and its search for truth. The body has desires and these cause disagreement and war, so that humans no longer recognize what truth is. Humans are slaves of their bodies and they are, therefore, not free until they are released from

⁶² See more about the view of René Descartes in Chapter Four.

their bodies. To reach the highest virtue, true wisdom is only possible when a human is dead and the body separated from the soul (*Phaedo*, 106-116). In Plato's philosophy a human is a creature situated between the world of ideas and the world of sensations (or perceptions). The real life of the soul is in the world of ideas, and time on earth is only a bodily period because the soul exists before and after in the world of ideas that is the superior world of human (e.g., *Laws*, 894e-897b; *Phaedo*, 70c-72d; *Phaedrus*, 245c-248e; *Republic*, 608c-611a). While Plato regards the soul as immortal, he implied it had lived and died so many times that it had seen but forgotten all things by birth and thus had to learn them again through "recalling" its hidden knowledge (*Meno*, 81c-d). Both Plato and Aristotle regarded the soul as the cause of everything (Plato's *Laws*; Aristotle's *On the Soul*).

However, with his view of humans in relation to other animals Aristotle was more advanced than what was the rule for many hundred years following. In *On the Parts of Animals* Aristotle praised the entire natural world:

Every realm of nature is marvellous: and as Heraclitus, when the strangers who came to visit him found him warming himself at the furnace in the kitchen and hesitated to go in, reported to have bidden them not to be afraid to enter, as even in that kitchen divinities were present, so we should venture on the study of every kind of animal without distaste; for each and all will reveal to us something natural and something beautiful. Absence of haphazard and conduciveness of everything to an end are to be found in Nature's works in the highest degree, and the resultant end of her generations and combinations is a form of the beautiful. (Aristotle, *On The Parts of Animals*, trans. 1994-2009, Book I, Part 5)

In opposition to the custom today, Aristotle discusses the human body in comparison to other animals without making any important distinction (for example comparing the stomachs of humans and dogs in *The History of Animals*). In *On the Parts of Animals*, he claims: "If any person thinks the examination of the rest of the animal kingdom an unworthy task, he must hold in like disesteem the study of man" (Aristotle, *On the Parts of Animals*, trans. 1994-2009a, Book I, Part 5). In *On the Soul* Aristotle sees the soul as the cause of the living body, regardless of whether that body is an animal or a plant (nutritive soul). All animals have a sensitive soul, but the human soul is the only one that is rational. The soul is the source of movement, the end and the essence of the whole living body; it is not separable from the body.

In many traditions, nature (including the animal part of humans, the body) has been deemed to be something organic and physically alienated from the existential

states of mind. The Christian church fathers connected sinfulness with the body, sensuality, and sexuality, while they regarded the soul as divine (Suutala, 1990). There are however, many Christian views of the relationship between body and soul; likewise, there are always new views of how Plato, Aristotle, and Descartes looked upon the relationship between humans and the rest of the natural world. Yet, a dualistic split between soul and body is undeniable throughout history. This view has favored the soul as rational or divine—or even as both rational and divine—and in opposition to nature and the body.

In Willamo's (2005) opinion, education primarily has sought to promote talents that split human beings from their relations with nature. Knowledge and books have shaped human being's relation to outer world, while humans have had to deny the grounding of the body in nature. Willamo also stresses that human beings can never step away from their place in nature and, therefore, he deems it problematic when nature is presented objectively, as something apart from human nature's biological roots. The only nature that receives attention, then, is a negative and problematic one.

Environmental protection is like couple therapy for the relationship between culture and nature—we apply therapy when the relationship is harsh. But, the relationship includes much more than problems, and a good therapist also studies the relationship holistically, even though the most crucial aim is to solve the problems. If the problems fill up the mass media, the language and our thoughts, it becomes more and more difficult for us to see the environment and our relation to it as an entirety, in which the problems represent only one dimension.⁶³ (Willamo, 2005, p. 285, Wolff's trans.)

In a world experiencing increasing environmental problems, the Enlightenment ideal, whether in modern or postmodern versions, that emphasized human reason on behalf of body and nature might turn out too one-dimensional. It is hard to deny that a human being is a holistic entity that consists of consciousness as well as body; a biological creature and a thinking one. In that light, female and male features, reason and emotions, are equivalent and both women and men have the same rights and responsibilities independently of their gender roles.

⁶³Ympäristönsuojelu on kuin kulttuurin ja luonnon suhteen pariterapiaa – terapiaanhan turvaudutaan silloin, kun suhde on kriisissä. Suhteeseen kuuluu paljon muutakin kuin ongelmia, ja hyvä terapeutti selvittää suhteen kokonaisuutta, vaikka ongelmien ratkaisu onkin tärkein tavoite. Jos ongelmat täyttävät median, kielen ja ajatuksemme, on meidän aiempaa vaikeampaa nähdä ympäristö siihen kokonaisuutena, jossa tämä ongelmaisuus on vain yksi ulottuvuus.

Holism

Humans have split their own being into two separate parts, mind and body, but have divided education into many distinct disciplines. Since the Tbilisi Conference, researchers have often recommended that environmental education should be viewed *holistically* (e.g., Palmer & Neal, 1994; Pittman, 2004; Sterling, 2004). Yet, a holistic educational approach can be implemented in many ways and on many levels. On one hand, *methods* can be holistic, so that cognitive reflection, bodily experiences and aesthetic contemplation simultaneously intertwine. On the other hand, educational content can be arranged holistically into an *interdisciplinary topic*. Instead of splitting the issue into many subjects, an interdisciplinary approach deals with the topic from many disciplines; for example, jointly from chemical, biological, and historical perspectives.

Holism can also be an approach to organizational change that starts from each individual and ends up with a new and transparent educational organization in which the sustainable aspects become a part of the entire institutional life (see Pittman, 2004; Wolff, 2002). Sometimes these kinds of holistic organizations copy ecological models in nature (cf. Pittman, 2004; Sterling, 2004). In indigenous education, “a principle of totality” or “holism” (Muzzin, 2005, p. 128) implies shaping situations where collective knowledge, in its diverse form of stories, art, songs, ceremonies, prayers, and so on, is used to shape understanding of the people’s relationship with the natural world. Still another kind of holism involves “transdisciplinary approaches” used in environmental management and sustainability negotiations where representatives from different fields of knowledge meet to discuss shared concerns; for example, various academic disciplines, policymakers, artists, and farmers (see, e.g., Fish, 2008).

Finally, a holistic view may imply something more than the manner of implementation. It may entail the way human beings consider their roles in nature and that the educator’s worldview has considerable consequences for such instruction. As opposed to the *anthropocentric* view described just above, where human beings are held to be superior to other parts of nature, instruction where the educator considers human beings as equal to the rest of the nature, neither superior nor inferior, can produce greatly different outcomes. The most radical variant of this *eco-centric* view is *deep ecology* that has taken many forms joint by an ethics that gives all parts of nature an intrinsic value. Inspired by Mohandas Gandhi (also known as Mahatma Gandhi) and Baruch de Spinoza, the Norwegian philosopher Arne Næss

was the first who uttered the terms *deep* and *shallow* ecology. “Shallow ecology” stands for the tendency to value humans as superior to all that belongs to the non-human world, which consists of an endless number of disconnected objects for them to utilize (Fox, 2003). In contrast, “deep ecology” sees humans as part of a nature, where all elements are connected and flexible. While the “shallow” metaphor leans on economic growth, the “deep” metaphor is based on ecological sustainability. “Deep ecology” emphasizes the necessity of listening to one’s own intuition in situations when nobody else can prove it to be wrong (ibid.). Næss (2003) believed in coherent thoughts and actions and underscored that the environmentalists cannot be reliable educators if they hide what they believe in:

Conservation strategies are more eagerly implemented by people who love what they are conserving, and who are convinced that what they love is loveable. Such lovers do not want to hide their attitudes and values, rather they will increasingly give voice to them in public. They possess a genuine ethics of conservation, not merely a tactically useful instrument for human survival. (Næss, 2003, pp. 263-264)

A basic norm of deep ecology is “self-realization”, but since all belongs to the same entity, “Self-realization aims at realizing for all beings!” (Næss, 2003, p. 273); or, in other words, “Maximize symbiosis!” that follows from “Maximize diversity!” (ibid.). Thus, there are “just as many ecosophies as there are supporters” (Næss, 2002, p. 101). In line with Gandhi, Næss warned about the tendency of having a high living standard as a life project, as well as trying to solve environmental problems with help of technology. Instead, he underscored the need for gentle, joint human efforts and more responsibility and tenderness towards all living things. Gandhi (1938) distinguishes between the conventional meaning of the word *civilization* and *real civilization*, where the latter deals with duties and morality. Morality is the practice of controlling oneself and both one’s physical and mental desires. When a person is able to master her or his own desires, then she or he has attained self-knowledge and happiness, a mode Gandhi calls *Swaraj*. Spinoza considered God and the world as a unity; every single part of nature is both a part of the world and a part of God. Spinoza⁶⁴ wanted to endorse an ethics that could inspire people in different contexts to take action on behalf of this entirety and, following this inspiration, Næss developed deep ecology into a philosophy of partly practical character. He called this

⁶⁴ I will deal more with Spinoza’s view in Chapter Four.

philosophy *ecosophy T*,⁶⁵ which is an ideology based on deep reflections and actions towards a total understanding of the relationship between human beings and other biotic systems (e.g., Næss, 1973/1981). Yet, it is also an ideology emphasizing mutual human relationships. The goal of this ethics is suggestive of the goal of sustainable development articulated in the Brundtland report, but it includes *if*, and this simple word “if” is the element that entails freedom.

In human relations today, there is one universal precept which is particularly important, namely, that we ought to arrange our lives in such a way that others can also live like us, *if* they so wish.⁶⁶ (Næss, 2002, p. 115)

This open-ended formulation is crucial. It contrasts with behavior modification and relates to Rousseau’s view of education for freedom. In addition, this sentence talks about present reality, not a visionary future. While it is impossible to increase the living standard for the world’s entire population to the Western standard, Næss (2002) asks for another kind of Western education, an education that puts more emphasizes on emotional maturing and trains feelings for the joy of life and how to take pleasure in simple things. This leads us to the question if education might be the scapegoat.

Education that Forgot Nature

In addition to Christianity and dualism, a third cause of suspicion could be that *education* has actually led people to neglect nature instead of the opposite (e.g., O’Sullivan, 1999; Peltonen, 1997; Wolff, 2008). Perhaps education has facilitated the view of humankind as superior by emphasizing nature utilization and human cultural life more than the human role as a biological creature. Societies have for ages, probably as long as human beings have existed, striven to, on the one hand, foster individuals who are capable of making their own living and, on the other hand, make a positive contribution to society. It is often obvious that a particular education system at a particular time prioritizes both of these aims. Both can have many different implications; focus on the individual can emphasize everything from that individuals shall be free to choose their own way of life to achieving a vocation and

⁶⁵ The letter ‘T’ comes from the name of Næss’ mountain cottage, *Tvergastein*.

⁶⁶ The author of this book (Wolff) is responsible for the italicizing of Næss’ sentence.

earning money to support that way of life. As regards society, aims can differ from promoting some kind of democracy and citizenship to educating people into a particular economic system. The attempt to educate individuals and members of society can also be distinguished in two other ways: an education for transformation promotes a predestined or indefinite change, while an education for transmission of the status quo resists change. In addition to focusing on the individual or society, a third source of influence is religion or divine curiosity.

When religion plays a main part in education it strives to foster worship and prepare for a faith-guided earthly life and an afterlife in paradise. It is true that the influence of religion since the Enlightenment has gradually declined in countries with a Christian tradition and religious values are increasingly sidestepped by secular (even profane) ideals. Nevertheless, the impact of religion on education and society is still very apparent in many parts of the world, places with Christian religions and those with other religions. When education focuses on religion, the soul is the main target, not the body or the natural world.

Life in accordance with nature has never achieved a role comparable with any of the three mentioned targets of Western education: not the individual life, not the social life, and not even a heavenly life, and none of these three aims essentially emphasizes nature. Instead, education about nature has been assessed in the same way as mathematics, language or history: only as a subject of secondary concern compared with more profound educational ambitions. Not until the middle of the 20th century, when the future human life on earth appeared to be threatened, was a new interest in environmental education awoken, but even then it is still more of an ‘add on’ to the curricula than as a central interest. Despite the fact that the human species is very dependent on a healthy planet as its habitat, and always has been, education has put nature aside for too long and treated it as a secondary concern. Education has promoted utilization of the natural world as a resource, and nature has been regarded as a place, a tool or an object to help humans maintain their life functions, to develop their societies and cultures. But, it has seldom been seen as something worthy enough of love and respect to study or enjoy for its own sake, without instrumental purposes.

Modern Education

Although education has a very old history, the Enlightenment faith in knowledge, science, and reason based on logical thinking denoted a significant educational shift

and a brave hope that increased education could lead to existential improvements for all humankind. In the late 18th and early 19th centuries, German Enlightenment philosophers referred to the concept of *Bildung*⁶⁷ as a promising holistic educational approach for developing humankind—an approach that tried to cast off the yokes from the church and a restrictive society. The role of education was to culturally ‘shape’ individuals and thereby transform society (Masschelein & Ricken, 2003; Siljander, 2002). The modern *Bildung* concept is built on the belief in individuals whose action competence is based on rationality, and who are prepared to transform both themselves and society in an open-ended process, according to Siljander (2002). However, Masschelein and Ricken (2003, p. 140), on the other hand, emphasize that “*Bildung* points principally towards individual self-realisation and selfelevation in all spheres of social reproduction and therefore breaks through the essentially affirmative character of *Erziehung*,”⁶⁸ and is not open-ended.

The *Bildung* approach has its roots in the Ancient Greek concept of *Paideia* and is thus built on a completely anthropocentric humanistic principle with human needs as its central concern. *Bildung* is the individual’s conversation with self, but *Bildung* does not come about of itself; it is dependent on an education in which criticism of the present circumstances is allowed. *Bildung*, like *Paideia*, is one of many dreams that human beings have envisioned according to the tradition that education can gradually change the world to be a better place for people. *Bildung* recognizes that human beings have intrinsic possibilities for self-improvement but also the capacity for joining together in the further development of society. However, the assumption of the human being as a dynamic rational being capable of actions that can transform the immediate present can also be seen as a concealed control mechanism that strives toward “normalization” (see Masschelein & Ricken, 2003).

Pragmatic educational approaches have built on Dewey’s democratic proposal. In his renowned 1916 book, *Democracy and Education*, Dewey argues that education has to take place with both the individual and the individual’s position in democratic society in mind, and he strongly believed in a practical approach. Ideas similar to those of the pragmatic scientific outlook that he unveiled in *The Quest for Certainty* (Dewey, 1929) were employed to the education of young people. Dewey stressed the democratic task of education, with the intention being that young people who are

⁶⁷ The German concept *Bildung* has no direct translation in English, but is usually translated as “culture formation” and even merely “education.” I will use the German term.

⁶⁸ The German word *Erziehung* can be interpreted as “education” or “upbringing”.

allowed to take part in diverse social activities will develop into responsible members of society. If knowledge does not influence the formation of social life, but only develops self-centered experts, it has failed in its mission, according to Dewey (1916/2006).

Dewey was skeptical of German education based on *Bildung*, which had served as a model for American education in the 19th century; especially the ideas of Friedrich Herbart (see Dewey, 1916/2006). While Herbart emphasized educational aims chosen according to universal ethics, Dewey stressed the practical use of knowledge, arguing that the conception of education as a social process is meaningless without having a certain kind of society in mind. When Kant (1803/1900) defined education as the process by which man becomes man, Dewey accordingly situated learning in a social setting, responding that man becomes man through interaction. He stressed the problem (still a gap) between the global and the national requirements for education. The arts, sciences, and trades are transnational interests, but smaller societies need to promote social talents and civic commitment. Dewey criticized both the emphasizing of cosmopolitan and of national (nation state) educational aims, and regarded both as incomplete. His aim was to free the potentials of individuals and, at the same time, to encourage their social development. There is, however, a great difference between the *Bildung* tradition and Dewey's view of nature and science. He did not spare his words, when he criticized the development of science:

Thus while in fact the progress of science was increasing man's power over nature, enabling him to place his cherished ends on a firmer basis than ever before, and also to diversify his activities almost at will, the philosophy which professed to formulate its accomplishments reduced the world to a barren and monotonous redistribution of matter in space. Thus the immediate effect of modern science was to accentuate the dualism of matter and mind, and thereby to establish the physical and the humanistic studies as two disconnected groups. (Dewey, 1916/2006, pp. 258-259) In Dewey's (1916/2006) opinion, human affairs cannot be split from nature since humans are very dependent on the natural world as their home. History shows that humans are not aliens in nature; he even argued that research has to be based on the methods used in the natural sciences. Dewey opposed fragmentary studies of nature:

Nature and the earth should be equivalent terms, and so should earth study and nature study..... When nature is treated as a whole, like the earth in its relations, its phenomena fall into their natural relations of sympathy and association with

human life, and artificial substitutes are not needed. (Dewey, 1916/2006, pp. 194-195)

For Dewey, nature was a basic topic for education, and should not be sidestepped by literary or humanistic interests. In *Experience and Nature*, Dewey tried to explain that human's experience is founded in nature. Dewey's research was interdisciplinary: he dealt with education, social philosophy, logic, aesthetics, social psychology, naturalism, and philosophy. He had a great interest in science, but never as a means solely for technical development and economic progress. Even though he criticized the German Idealists, his ideas were initially rooted in that tradition, and he had a dream of a morally better society (see, e.g., Carr, 2004; Fallace, 2008). However, his successors followed his pragmatic ideas and the scientific method, but they did not retain his critiques concerning nature and society (Dalton, 2001). Nonetheless, Dewey emphasized participation, cooperative learning, and interactive methods that can be beneficial when teaching about complex environmental problems.

Dewey managed to combine scientific and democratic principles in his educational vision, and in combination with Enlightenment ideals, these ideas (even if dampened) created the foundation of American education and have had an obvious influence on the education in many other regions, such as in Europe. *Bildung*, however, has been stronger in Europe. *Bildung* and pragmatism have both served as philosophical bases for educational development in many parts of the world until the present and have had a great influence on diverse forms of education, not only in Western countries (see, e.g., Bowen, 1981; Eby, 1952; Liedman, 1997). However, neither seems to have been sufficient to meet the needs of a world facing environmental problems. According to Bauer (1997, 2003), *Bildung* per se cannot be accused for causing the environmental problems, but the route it has taken has loosened its connection to social contexts. Carr and Kemmis (1986) call Dewey the last of the "grand theory" philosophers who searched to situate education in the framework of a larger social theory. However, the ideas of the grand theorists have generally been followed only in parts.

History has mostly dealt with human culture as separate from natural history, and even human history is often taught from a very short time-span. One philosopher (von Wright, 1994) skeptically asked if humanism actually carries the seed of its own destruction. It seems as if the gap between humans and the rest of nature is constantly

renewed by humanism's focus on human development. In that situation it will be a tremendous task to reverse the trend and to bridge the gap between humans and nature. However, it is questionable how much of a role education is able to continue to play in narrowing the gap. Uljens (2000) stresses that it is impossible to solve crucial global problems only by means of 'objective' information that is free from political and ethical considerations. A related point is, that politics and education are not the same thing; they have different roles to play. Education cannot be the only tool for creating society because it is not the task of education to define the good society (ibid.); instead, it is the ongoing role of education to discuss what the good life might be (Uljens, 2004b).

The Dream of Perfectibility

The strong belief in education as a tool for correcting failures and attaining given goals has a long history. Human knowledge has been seen as constantly expanding and, similarly, humans as progressing in the direction of, if not a completely perfect state, at least an increasingly more perfect state of being (Passmore, 1970). Such perfection can involve development of technical skills that result in better performance of particular tasks; but it also includes improvement in reaching particular teleological states, such as happiness or well-being. A third mode of perfection is obedience to the commands of authority. Society, nature or God can set such tasks, ends, or dictates. The perfect state is infinite and thus ideal. If this ideal model is God, humans have striven to become more godlike; if the ideal is nature, they seek to be more natural. The ideal has also been to meet some other standard, such as becoming a perfect citizen in a perfect society. The physical body, however, has often been seen as a hindrance and, therefore, the most perfect state has not been possible in this life. Another path for the individual than death has been to cast off the bodily yoke and search for another mental state through meditation or by the use of drugs. Still another option for reaching perfectibility is the new interest in eugenics: perfection of humankind by genetically manipulating the birth process (ibid.). Utopian writers have played with ideas about super humans and ideal societies. There is, however, still a gap between belief in a perfect human being and actually becoming perfect. Many real examples show that humans are still far from perfect and contemporary dystopia authors (e.g., science fiction authors) hardly believe in any future human improvement. Until his last days Næss (2002), however, believed

in a human transition from a lower degree of perfection to a higher through a self-transforming process. The direction he pointed to was an active change towards a more joyful life and more positive feelings towards all other creatures.

Orr (2004) is no friend of perfectibility; at least not with the help of different kinds of knowledge. According to him, it is a myth that human knowledge leads to increased wisdom and goodness, to a more perfect state of being, because he does not believe that human intelligence can ever safely manage the world. That ignorance is a solvable problem and that human can comprehend all the world matters he regards as myths, since education has not improved the state of humankind. He calls for measuring the result of education in terms of increased human decency and how well we manage to live within the limits of the natural world. Actually, he is afraid that some form of ignorance that may become disastrous will follow every step of advanced knowledge. With this he wants to imply that many scientific advances have brought with them severe environmental problems. Thirdly, Orr lists one of von Wright's (e.g., 1986) main argument in the social development debate, the myth that the management of the earth will be possible with advanced knowledge and technology. Orr's and von Wright's arguments are not falsifiable, but neither are they conclusive. They are drawn too categorically: although knowledge alone may not save the earth, knowledge is not merely a bad thing, and fallacy can sometimes lead to something good. The definition of knowledge is crucial here. In von Wright's (1993) opinion, the myth of continuous economic growth and expansion has outpaced non-scientific and non-technical knowledge as irrational or affective. That means that only Western rational knowledge is true knowledge. It is a myth to believe that science and technology lead to happiness (*ibid.*). The knowledge Orr (2004) criticizes has deep roots in modernity—that is, the Enlightenment—and is widely and quickly produced and distributed, but he is not without hope for the role of education if the view of knowledge changes. He seeks knowledge that can neither be produced quickly nor rapidly distributed, but that is reflected on and felt. Such a process may take time, so it makes humans realize that they are of the earth and live in cycles of birth and death; that the body responds to the earthly rhythms of light and darkness and changes of seasons just like other living things on this planet (*ibid.*). This argument brings in a new question, namely, if humans see themselves as a part nature or not.

Human Nature vis-à-vis Nature

Although I already raised doubts that Christianity is a main source of our environmental problems, it is still not free from the scapegoat label. To start with, in the Christian tradition nature the human body, especially the female one, has been regarded as immoral, housing evil desires and passions. Therefore, according to this view, nature needs a rational masculine ruling mind that is more divine than the female's sinful and material body that belongs to nature. Secondly, when it comes to *Bildung*, the concept originates in the world *Bild* that means picture. This could entail that humans who have obtained *Bildung* have become more akin to the picture of God and that they then might have the godlike right to treat nature according to their personal desires. *Bildung* can also be a verb, and then it means *build* or *form*. From a strictly *pragmatic* angle, education has to primarily provide workers and citizens with vocational training and thus promote the wellbeing of society. Combining these views, the natural world could be seen as a primary source, as a supply for godlike humans to utilize as they please. But, of course, a godlike creature could also act God's role as a master responsible for the wellbeing of the entire creation or using the word "build" as a metaphor for building a better world.

As a final point, behind the whole idea of being godlike may be the humans' need to cross their limits of understanding and thus transcend that limit. The history of the human dream and effort to progressively reach ever-further and to bridge both physical and mental borders is most certainly a main motivation for both cultural and technological developments, but it has also led to environmental problems. This realization leads to the final point.

The fourth and last possible scapegoat, beside Christianity, dualism, and education is a reversal of explanations that blame external—cultural or social—reasons. This alternative instead seeks the sources of such problems in human beings themselves; in other words, in the *human character*. Maybe it is an inherent human characteristic to step out of 'wild' nature and search for other, more 'civilized' human qualities. Acting in this way, people perhaps try to gain recognition from their fellow humans and thus raise their social status, thereby demonstrating personal importance and power and striving for recognition as splendid examples of humankind. There often seems to be a conflict between society's claims on the individual and the individual's own desires. Whose claims are then best met by the idea of sustainable development? The universal idea of sustainability requires both

individual and joint responsibility and it thus threatens both individual calls for freedom and the claims of liberal societies that generously offer multiple choices.

Finally, it is worthwhile considering whether humans still have an interest, however well hidden, to build a more sustainable relation with nature and an inward need to be a part of nature more comprehensively than our society presently endorses. Thus, they may see sustainable development as a profound opportunity and challenge. The idea of sustainable development is advocated at many political levels as a duty for all members of society and market forces have been quick to accept responsibility. Commercial organizations consider a gentle environmental image as an obligatory and necessary advertising strategy for successful global competition. So called “greenwashing”⁶⁹ has become the order of the day entailing that environmental attributes apparently have achieved market value. It increasingly has become a duty for every profitable company to advertise its environmental awareness (see, e.g., Le page, 2009; Todd, 2004). It might at first sound good that marketing interests correlate with international environmental political demands; the problem, however, is that the methods are not necessarily ethically in line with the goals. Consequently, individuals (consumers) become caught in an unavoidable trap and are made dupes of other’s economical prospects instead of encouraged to make their own choices, thus developing a more personal global responsibility if their own judgment convinces them that it is crucial.

Catch-22

The reflections that I have presented so far in this sub chapter (2.2) offer no more than a narrow idea of the complexity of the environment dilemma: it is a gigantic and true-life Catch-22.⁷⁰ Christianity is built on ideas that flourished long before the Bible was written and combines many elements from Ancient philosophy, old religions, and myths. Analogously, dualistic thinking is deeply rooted in the history of humankind and relates to host of contrasting elements beside female-male and body-soul: for example, day-night, heaven-earth, god-devil, virtuosity-vice, and yin-yang. In conclusion, the master (shepherd) features of Christianity are not merely a Western

⁶⁹ Marketing of “green” products has many not quite identical names, like “environmental marketing”, “sustainable marketing”, “green marketing,” or “ecomarketing” (Todd, 2004).

⁷⁰ The term ‘Catch-22’ refers to Joseph Heller’s novel (1961) of this title and denotes that somebody is trapped in a tricky situation built on circular rules for which there is ‘no way out’.

phenomenon. Yet, is education? Because education never has favored the natural world very much, education is hence seen as the scapegoat that might be easiest to reform and use to help overcome the other obstacles. The potential role of education is a story that continues all through the rest of this book. The previous section of this chapter (2.1) showed that changing the course of the world through education is not a self-evident goal, and it is not even obvious that such a goal is appropriate if it includes changing student's inner lives and behaviors. And there are also other hindrances than the Christianity, dualism, and education discussed above: not only is human nature a hindrance, but external elements—society, culture—also impede progress.

Ideologies guide human actions over the long term, but practices such as politics and economics, with their impact on commerce, production and daily life, influence the natural world and human environments more or less directly. Nonviolent use of land and resources as well as warfare leaves signs of various magnitudes in nature and society. It is not only that human greed causes environmental damage, but the struggle to survive, find daily food and protection is also responsible. In such situations, the natural world and its welfare stand between life and death, an unavoidable gap where there is no other choice than the need to survive. In addition to activities that are directly dependent on human beings, it is worthwhile remembering that fundamentals like a region's or state's geographical position, size, climate, natural disasters and diseases, and accessible natural resources have a notable impact on how forcefully the natural world reacts to humans' recent and future activities. Moreover, humans do not cause all nature catastrophes, so they cannot be blamed for everything that causes harm to nature and its non-human creatures. Additionally, the search for the most basic causes of environmental problems is a precarious undertaking: whatever the path chosen there are other tempting roads leading in ever-new directions, including both forwards and backwards. Finding the way out is like searching for clues in a labyrinth.

Environmental problems and the idea of sustainability are intricately interwoven; they are also value-laden and thus complicated cultural and social matters that are therefore very difficult to address in education. A big problem concerning our species' way of dealing with the natural world and environmental issues relates to human self-centeredness and lack of a sense of responsibility for fellow humans and other creatures—not to mention future generations of life on earth. Today, many people are both constantly widening their geographical impact on nature, with

negative effects on ever-larger parts of the globe, and are causing damage with incalculable consequences for the future of the world. There is, however, no reason that human beings should have steadily become greedier and more demanding; it is only the means of satisfying such human desires that have expanded. “We are probably not more wicked than our ancestors, but we are more dangerously equipped” (Belshaw, 2001, p. 26). And as our number increases day by day, why should not our impact grow?

I want to point out that many countries struggle with environmental problems that stem from insufficient education; where parts of the population lack the knowledge and skill needed to handle the complicated environmental related issues of their daily lives. The question cannot, therefore, be *if* we shall educate people about environmental issues or not, but about *how* to do it. We already know that mere or more knowledge is not enough to trigger responsibility: knowledge alone does not promote the will to act. A first step towards a bridging the gap between knowledge and action is to become aware that this gap exists and presents a wide of challenges that must be met in closing it. Most demanding is the need to face what hides in the gap, conditions such as prejudices, vanity, idleness and various egoistic desires. Contemporary educators have to deal with the hugely important moral conflicts facing humankind, namely the conflicts between social responsibility and individual freedom. Finding a point of departure is a process that inescapably involves difficult ethical criteria. The alternatives are many, and stretch over a large range from extremely normative instruction to radically critical ways of teaching. Every methodological crossroad is, at the same time, an ethical one, since every choice of method reflects an ethical preference. But, if we agree to the transformation of individuals as the appropriate aspiration for education, we have to accept the risks that accompany change—including the risks of going forth into the unknown and of changes in existential modes of being with which educators have become comfortable, perhaps too comfortable. There is certainly a connection between the educational situation and the educators and students that is similar to the connection between the critical researchers and their research methods described in the previous chapter: a reflective practice generates a change of values among the involved doers. Yet, the outcome of such changing values is not foreseeable.

2.3 Conclusion

In conclusion, I have discussed the many weaknesses in proposals arguing that knowledge about environmental dilemmas results in practical conduct. There are two central and intertwined questions in the debate about education for a globally sustainable life: on the one hand, how to bridge the gap between human knowledge and practice; and, on the other hand, how to solve the conflict between private desires vis-à-vis social obligations. It is not only impossible to lay out a predictable route from environmental knowledge to action because of so many intervening and unpredictable components. Individual choices and fulfillment of personal desires do not necessarily promote socially valuable goals. In this chapter, I have also discussed a third gap, namely the gap between the rhetoric of environmental educational and reality that directly reflects the gap between knowledge and practice. This gap exists when the institutional aims and values articulated in curriculums and plans are in contradiction with daily actions. It is much easier to formulate profound words in documents than to live according to these goals in daily life. I have also mentioned a fourth gap: the distinction between the researcher and the researched, a gap that entails that the researcher is the one who knows how to live an environmental gentle or a sustainable life and searches for methods to change other persons' thinking and lifestyle in accordance with this conviction. Researchers may believe that they 'objectively' know what is collectively right for others to do, but do not look upon themselves as participants in this collective; they are the outsiders, the observers, or to use Rousseau's vocabulary, a type of lawgiver. It is not self-evident that it is necessarily right to try to purposefully change another person's behavior, no matter how urgent the purpose might appear. Both teachers and researchers have to be aware of that they might have to make a choice between self-determination and indoctrination. Is it possible for a human being to learn to freely judge and select between what she immediately wants and what should be a better choice for all society members on a long term? And does any generation of teachers know what is best in the long term.

As fifth gap is the one between knowledge and power of position; a person can be in a position that calls for action, but lacks know-how or any other wherewithal a responsible actor needs, or knows but lacks power. The biggest gap of all, however, is the one setting humans apart from the rest of nature, the natural world, including the human body and its role in the female-male gap. The view of nature as something

separate from humans suits global economic development and the gap between body and soul is often mentioned as a scapegoat of the environmental problems that humans struggle with, but the dilemma is complex and searching for scapegoats is, therefore, not easy. Forces and people willing to sacrifice nature because of other competitive interests everywhere on earth, independently of religion or philosophy, are more likely culprits. Lack of knowledge and skill can sometimes sabotage good will. How humans treat nature is to a great deal a question of circumstances, capabilities and means, but this does not need to be a completely haphazard process because human beings after all, are an intelligent and morally aware species. Finally, there is one more crucial gap to consider: the consideration of how what is sustainable today may diverge from what will be needed in the future. The intergenerational gap stemming from social change might be wider than the knowledge-action or attitude-behavior gap (see O'Donoghue & Lotz-Sisitka, 2002). Many of the available methods for handling the future environmental dilemmas have proved to be dysfunctional, malfunctioning, or too slow and will hardly be effective in the future. Future problems may require more suitable methods than anybody knows today and meeting future challenges may need other visions than that of a sustainable development.

The mixture of moral- and knowledge-related dilemmas described above shows that education that tries to promote a more sustainable society is faced with a tricky and multifarious enigma. It is obvious that there is a considerable need for new kinds of philosophical and educational outlooks in discussions about this topic. The words “sustainable” and “development” are not resistant to critique and it often seems like the discussion misses the target. Furthermore, it seems difficult to point out any scapegoats for our environmental dilemmas; but, as the most possible scapegoat, I am nonetheless willing to address the last of those I have studied, human nature. The human character relates to a huge number of complicated affairs between humans, such as politics, economics, and an unending variety of private relations. Education has not managed to face up to this complexity of human life—either intrinsic individual problems or extrinsic social problems—and this educational shortcoming is nothing new.

Therefore, I will take a time journey a few centuries back to study the role of nature and education during the early modern era and the unsettling Age of Enlightenment, using Rousseau as a case. Continuing from the last suggested scapegoat, namely human nature, I cannot find a better example than Rousseau, who

started his career as a *philosophe* by writing essays discussing human nature and writing about ethical dilemmas on many levels. Rousseau reflected on problems that are actualized in the discussion according ‘to be or not to be’ of the preposition *for* in environmental education, and he had also much to say about the gap between human nature and the natural world. The gap-dilemma is also a theme that finds inspiration in Foucault’s thinking. When stepping back and reflecting on Rousseau and Foucault in Part Two of this book, I hope to make it easier to shake off some of the more pressing predispositions and to identify the profound obstacles that prevent humans from living a more sustainable life. To study environmental education we cannot merely study environment, nature or education. Multidisciplinary studies can help us to face complicated problems that relate to many different disciplines, and history can confront us with hidden matrixes in human cultures. With the help of Rousseau and Foucault I will try to show in what follows that knowledge is much more than scientific truth and demonstrate that there are hidden power structures in our daily life influencing our daily activities. These powers affect our inner lives and being, make us play games and alienate our selves from our true characters, which we rapidly put in brackets and forget. Therefore, I cannot deny that even this kind of research and knowledge production has its aspects of power, but without power, humans cannot produce anything, so I have no choice. The next chapter begins with an explanation of how I will apply Foucault’s research methods in the studies presented in Chapters Four to Six. As a final remark, when I move on, I will neither limit the focus to environmental education nor to education for sustainable development; instead, do I actually prefer to simply talk about *education*, since the sustainability dilemma is too huge to be crowded into a specific discipline.

Part II

Between the Past and the Future

3 A Foucauldian Rousseau Study

After discussing the educational challenge of sustainable development and the probable causes of unsustainable human life, this chapter begins the second part of my research. The result of both studies presented in the previous chapter showed that education faces huge challenges because of the complicated relationship humans have with nature—relations which have created the sustainability conundrum. The challenge is not one, but engages a vast number in many human life arenas. One of the biggest challenges is the relation of humans to their human nature. That challenge calls for drawing upon philosophy. I will now, therefore, continue the earlier discussion about educational challenges and scapegoats: the four chapters in Part Two are unified by the philosophy of Rousseau using a Foucauldian approach; however, Foucault also becomes a third voice in addition to Rousseau's and mine. Chapter One gave a brief rationale for why I have chosen to rely on Rousseau and Foucault, but this chapter will deal in more depth with their contributions. The aim of this particular chapter is to describe the role of Foucault and Rousseau in the research methods used in Chapters Four, Five, and Six. Firstly, I will describe Foucault's basic research methods and especially elucidate why and how I will apply them. Secondly, I will demonstrate how Foucault's theories and methods correspond to the study of Rousseau's texts and how I will make use of them. In that connection I will also discuss Rousseau's authorship, and how I will deal with his special writing style.

3.1 The How of Foucault

Even though some history writers might include Foucault as a historian of intellectual history, the chair he held at College of France was one in the "history of systems of thoughts," a title Foucault had selected himself and which is often referred to simply as "systems of thoughts" (see, e.g., Marshall, 1996). I have already used the word *thoughts* several times in the first two chapters of this book, but Foucault used the word in a special way, and to understand what he meant by a history of thoughts his concept of "thought" needs interpretation. Foucault neither saw "thought" as a mental

action that leads to a certain conduct, nor as the domain of attitudes or meanings. In his vocabulary, “thought” is an action that helps a person to free herself from habitual matrixes by questioning meanings and circumstances (Foucault, 1997c). “Thought is freedom in relation to what one does, the motion by which one detaches oneself from it, establishes it as an object, and reflects on it as a problem” (ibid., p. 117). According to Foucault, historians of thought analyze why certain practices or habits have become general problems that require practical solutions (Foucault, 1997c). Thus, a history of thought is interested in notions from their very beginnings and through their subsequent development, which in effect means how ordinary and accepted practices evolve into problems that elicit discussion and indicates crises. In Foucault’s view, there are many kinds of thoughts in a culture; “there is thought in philosophy, but also in a novel, in jurisprudence, in law, in an administrative system, in a prison” (Foucault, 1998f, p. 267). Such thoughts involve searching for and establishing of what is regarded as ‘truth’ in controlled social systems (Foucault, 2000i). Since there is always more than one ‘truth’ at stake, the history of systems of thoughts is open-ended and deals with numerous visions, revisions, and trials (Faubion, 1998). In contrast to a ‘global history’ that sees history as an unfolding process guided by strict traditions and lines of development, Foucault focused on a “general history” (e.g., Foucault, 1969/2006, p. 10) that is uninterested in composing a totalized picture of the reality at stake but searches, instead, for cycles, divisions, limits, and ruptures. He strongly rejected the historical aim of retracing motives. Instead of searching for ‘totalizing’ accounts of ‘the truth’, as “the historians of history” typically have done (Foucault, 1998c, p. 380), Foucault advocated looking for partial changes and encouraged focusing on specific issues and areas of human life; on the individual sphere in relation to social and institutional circumstances (see, e.g., Foucault, 1997h). During his active life as a researcher, Foucault developed methods that served the purposes of his alternative investigative processes. However, when he talked about “method,” he did not mean a ‘tool’ for instrumentally realized ends but, instead, offered an alternative way of confronting problems and asking questions.

While an important aim of Foucault was to sketch out a history of the diverse ways humans develop knowledge about themselves, he studied a number of social phenomena, such as madness, crime, sexuality, and so forth. He focused on how humans govern themselves and others by producing truth and thus justifying their practices. The relationships between humans and nature that are at the forefront of

this book are similar to the topics that engaged Foucault; those relationships can be studied in regard to many spheres of human life. Foucault not only considered the possibilities of finding definite limits of knowledge; he also reflected on knowledge about human limits. The quest for sustainability draws attention to many such human limits; for example, the limits of human survival and of human development but also of human moral commitment and education.

In his study of the history of thoughts, Foucault developed three forms of analysis, archaeology, genealogy,⁷¹ and ethics; and discourses were the objects of his studies. He called such discourses “games” that take shape through writing, reading, and exchange (Foucault, 1993). Archaeology is his method for systematically and historically analyzing and comparing the emergence of knowledge in various fields (analysis of ‘games’ of truth). Genealogy is the method for studying the connection between power and knowledge (analysis of ‘games’ of truth in relation to power), and in his ethical analysis Foucault finally studied how humans problematize their own existence (analysis of ‘games’ of truth in relation to self) (see also Davidson, 1986; Gutting, 2005). These threefold research interests can also be expressed in the terms of (1) *the re-examination of knowledge*, (2) *the conditions of knowledge* and, (3) *the knowing subject* (Rabinow, 1997).

Genealogy and Power

Archaeology was for Foucault the process of displaying the archives of systematic discourses and opening up what once has been said (see Kendall & Wickham, 1999). Foucault developed archaeology into his second method, genealogy, by including the role of power in his investigations. The term “genealogy” came from Nietzsche, and Foucault affirmed that his view of genealogy was quite similar to Nietzsche’s (Gutting, 2005). Much of what he argues about studying discourses in *The Archaeology of Knowledge* also makes sense in genealogy, although genealogy broadens archaeology by focusing on non-discursive forms of power. Like

⁷¹ The way Nietzsche and Foucault interpret the term genealogy differs greatly from the general interpretation of this word; even if Foucault states that he does not claim to be the first one who has performed research the way he did in *Discipline and Punish* (Foucault, 1977). The word “genealogy” in a dictionary is something that includes family histories, for example Webster’s (1994, p. 589) explains genealogy as follows: “1. record or account of the ancestry and descent of a person, family, group, etc. 2. the study of family ancestries and histories. 3. descent from an original form or progenitor; lineage; ancestry.” In daily language “genealogy” stands for family history, family tree, or research of pedigrees. Genealogy, as a research concept, is also common in biosciences, especially genetic genealogy.

archaeology, genealogy is non-interpretative; it does not attempt to disclose hidden secrets but, instead, seeks to find new sources of knowledge (not only from history books) and to read those sources in a new way to reveal fragmentation and inconsistency rather than unity (e.g., Foucault, 1998c). Genealogy does not avoid intimate details, but “it inscribes itself in the nervous system, in temperament, in the digestive apparatus” (ibid., p. 375). Kendall and Wickham (1999) compare genealogy with a dinner party where a frank utterance of a child makes all the other guests feel uncomfortable because they had wanted to keep hidden the truth that the child exposed.

Besides “general history,” Foucault also used the concept “effective history” as distinct from “the history of historians,” since genealogy is without “constants” (Foucault, 1998c, p. 380). Genealogy is the concept used to study the history of issues like morality, metaphysics, and life as an ascetic or liberated mode of being, and genealogy sees neither human life nor history as stable and thus seeks to reveal “discontinuity” (ibid., p. 429) rather than unity. The picture of history as a continuous flow is thus cut into pieces and all its ruptures revealed. Consequently, genealogy does not investigate history as a continuous development, where a historical sequence of causes and effects makes one comfortable (Kendall & Wickham, 1999); its aim is the opposite.

History becomes ‘effective’ to the degree that it introduces discontinuity into our very being – as it divides our emotions, dramatizes our instincts, multiplies our body and sets it against itself. ‘Effective’ history leaves nothing around the self, deprives the self of the reassuring stability of life and nature, and it will not permit itself to be transported by a voiceless obstinacy toward a millennial ending ... This is because knowledge is not made for understanding; it is made for cutting. (Foucault, 1998c, p. 380)

Neither fate nor mechanics rule the historical forces; its rulers are occasioning circumstances and struggles. Such occasions are, however, not to be considered as games of chance but more as myriads of entangled events. “Effective history” neither searches for long-ago circumstances but, instead, has an interest in what is nearest, such as the body, nutrition, whatever unattractive realities these findings may reveal (Foucault, 1998c, 2003). In the essay *Nietzsche, Genealogy, History*, Foucault (1998c) describes the characteristics of genealogy as corresponding with Nietzsche’s

view.⁷² Genealogy, according to Nietzsche, is not a matter of digging in search of the original. He argued that the beginning of human history is not as glorious as it was created by God's hand; it is sarcastic. As one commentator observes, "[w]hen genealogy looks to beginnings, it looks for accidents, chance, passion, petty malice, surprises, feverish agitation, unsteady victories, and power" (Davidson, 1986, p. 224).

As a result, Foucault preferred to call genealogy "anti-science" since it never strives to any scientific exactness but instead is a struggle against formal scientific discourse. Nietzsche clearly opposed looking for *Ursprung*,⁷³ a method of finding foundational truth and ideal Being. Two words that Nietzsche often used as synonyms and that, according to him, suit genealogy better are *Entstehung*⁷⁴ and *Herkunft*.⁷⁵ All three of these German words can be translated as "origin" in English. *Herkunft* has to do with belonging to a group by bonds of blood, tradition, or social status. Various aspects related to the body, such as diet, climate, and soil, are related to *Herkunft*. Nietzsche opposed the search for *Ursprung* to recover what once existed in attempting to establish a perfect picture by masking untidy effects as irrelevant. Nietzsche also used the word *Erfindung* (invention) in contrast to *Ursprung*, denoting a break or something that is low, small, or unfavorable, meaning something that might have started from modest beginnings (Foucault, 1994, 2000h). Therefore, Nietzsche was not interested in history that tried to remove all camouflage and displayed foundational states. Genealogy, according to Nietzsche, is ready to listen to what history has to tell. Its arenas are the most unexpected locations, and therefore the researcher has to carefully search for possible settings where, for example, phenomena such as feeling, love, and passion may be present, but also places where they are absent. This genealogical research can reach completely unexpected outcomes, sometimes even that what is being searched for does not exist or that it consists of innumerable components (Foucault, 1998c, 2003). History as genealogy aims at making one recognize strangeness and to question self-evident truths (Kendall & Wickham, 1999).

⁷² One cannot simply assume that Foucault accepted all Nietzsche's arguments in this essay, although Foucault presents them without his own comments; but this is the only time he describes in depth the historical approach he had adopted from Nietzsche, who called it "genealogy." Nietzsche's text nonetheless contains ideas in opposition to Foucault's political ideas (see Gutting, 2005).

⁷³ The German word *Ursprung* means in English roughly *foundation*, *root*; in Swedish *ursprung*, *rötter*.

⁷⁴ The German word *Entstehung* means in English roughly *coming into being*; in Swedish *tillkomst*, *tillblivelse*.

⁷⁵ The German word *Herkunft* is in English roughly *family* or *lineage*; in Swedish *härkomst*.

What it [genealogy] really does is to entertain the claims to attention of local, discontinuous, disqualified illegitimate knowledges against the claims of a unitary body of theory which would filter, hierarchies and order them in name of some true knowledge and some arbitrary idea of what constitutes a science and its objects. (Foucault, 1980c, p. 83)

Entstehung makes things visible without claiming that the first vision cannot be changed. The genealogy of morality, asceticism, and knowledge rests in details and mere chances; it tries to detect wickedness and irony. An analysis of *Entstehung* has to reveal acting powers; how they oppose each other or how they struggle together against adverse conditions. Nietzsche argued that power connections emerge and become visible through actions in real power situations. The emergence of power implies that such forces suddenly enter the stage. However, this does not necessarily happen in one special place, but can happen in a “non-place” of pure distance. Power can even struggle against itself (Foucault, 1998c, 2003). Power affects what is generally held as ‘true’ knowledge and what forms this knowledge will take, according to Foucault. He saw power as games of strategy that could create both good and bad results (Foucault, 1997g) and that take place, for instance, in and through education. It was no problem for him that a person who knows more gives instructions to those who know less, as long as there is no malign domination in the relation (ibid.). Without power, nothing could be achieved. In addition, where there is power there is also some degree of freedom, however limited. Power is at work when subjects are turned into objects, but also when they become subjects of their own self-knowledge or of someone else’s control (ibid.). Power struggles at both institutional and individual levels form humans and makes them who they are.

Freedom and Ethics

Like Nietzsche, Foucault believed that humankind can never reach higher moral awareness where all power struggles have been put in the past. Both thinkers denied the idea of a growing world consciousness or perfectibility. “Humanity does not gradually progress from combat to combat until it arrives at universal reciprocity, where the rule of law finally replaces warfare; humanity installs each of its violences [sic] in a system of rules and thus proceeds from domination to domination” (Foucault 1998c, p. 378). According to both, human power conflicts will last forever.

This estimation neither prompts one to settle down and relax nor to resignation but calls for action and experiment.

Yet if we are not to settle for the affirmation or the empty dream of freedom, it seems to me that this historico-critical attitude must also be an experimental one. I mean that this work done at the limits of ourselves must, on the one hand, open up a realm of historical inquiry and, on the other, put itself to the test of reality, of contemporary reality, both to grasp the points where change is possible and desirable, and to determine the precise form this change should take. This means that the historical ontology of ourselves must turn away from all projects that claim to be global or radical. In fact, we know from experience that the claim to escape from the system of contemporary reality so as to produce the overall programs of another society, of another way of thinking, another culture, another vision of the world, has led only to the return of the most dangerous traditions. (Foucault 1997h, p. 316)

From the studies of the intertwined topics of power and knowledge and of how knowledge is a tool through which humans can be made objects of control, Foucault turned his interest towards ethics and focused on how humans have taken responsibility for their own self-transformation. Foucault regarded individual freedom as the ontological condition of ethics, a relation persons have to themselves. Ethics is then the conscious practice of freedom, a “care of the self” that is wed to the concept “know yourself”⁷⁶ that is a primary form of this care. It is, however, not to be seen as a selfish practice but as a conduct that aims at promoting other people’s wellbeing, and it involves change and an expansion of the self towards a more proper way of living. But, care for one’s self is the priority. The power over one’s self regulates one’s power over others. When aware of one’s self and one’s own duties and limits, one cannot treat others badly. The subject is a form, a way of being, or an *ethos* that is flexible and changes according to time and context (Foucault, 1997g). According to Foucault both history and the history of ideas have focused on the subject as the source of knowledge instead of focusing on how the subject is constituted within or by history. Things does not just happen in history through subjects; subjects continuously form themselves within historical processes that establishes and re-establishes them (Foucault, 2000h). This formative process is also not an isolated exercise. To the contrary, even the self-practicing person requires guidance by a more advanced instructor or master in order to advance in her self-

⁷⁶ 'Know yourself' in Greek *gnōthi seauton*.

creation (Foucault, 2005). Knowledge, power, and the individual interrelate, since knowledge generates power that in turn creates new knowledge, and the individual is both a product of this power/knowledge structure and participates in its creation. Active self-creation should develop an understanding of one's position in relation to the world; an understanding that can lead to a conscious transformation of both the self and the world (see Foucault, 2000a, 2005). Consequently, Foucault's turn towards ethics was no break with his previous research strategies but a change of focus to the level of self-creation, while still relying on archaeology and genealogy. Yet, with ethics, the subject and its will to truth became the essential center of attention.

Even though Foucault gradually enhanced and changed the focus of his research and ended up in ethics, he never gave up archaeology or genealogy. The different modes are complementary not contradictory (see, e.g., Davidson, 1986). Foucault says that his works "are interwoven and overlapping" (2000b, p. 266); where one book ends, the next has already started. The most important reason why the last part of Foucault's writings can hardly be sidestepped is that they are the most advanced and complex of his constantly developing thinking that never paused or stopped while he was alive.

Foucault in Educational Research

Foucault's research approaches have been used often in the social sciences and, since the beginning of the 1990s, in a growing number of educational studies (Olssen, 2006). There are distinct opinions about whether or not Foucault has developed a theory of knowledge. In Faubion's (1998) opinion, Foucault had no theory of knowledge and Rorty (1986) also strongly argues for this alternative and does not want to refer to Foucault as a creator of a new epistemology or of any other theories, not even a method. Rorty writes that "much of Foucault's so-called 'anarchism' seems to me self-indulgent radical chic" and "all he has to offer are brilliant redescriptions of the past, supplemented by helpful hints on how to avoid being trapped by old historiographical assumptions" (Rorty, 1986, p. 47). Couzens Hoy (1986, p. 13), in contrast, supports Foucault's genealogy and calls it a "plausible method of immanent social criticism, one that can work without presupposing an independent, utopian standpoint." Following Nietzsche, Foucault did not believe in

any one and only historical truth; he rejected Cartesian epistemology and Hegelian eschatological⁷⁷ historiography (Rorty, 1986). According to Rorty, Foucault had a primarily negative maxim to offer and Rorty claims that a culture having a genealogy but no eschatology would make no sense. In contrast to Rorty, Couzens Hoy points out that Foucault wrote a history of ethics and not a history of moral codes.

Although he does not construct a totally different ideal to which we could aspire, his history does make us more aware of the shortcomings in our own self-understanding and practices. The imperative to change must come from within ourselves if it comes at all. (Couzens Hoy, 1986, p. 19)

Philp (1985) calls attention to the possibility that Foucault was more interested in *questioning* the so-called “grand theories” than of constructing his own. Foucault did not want to create any “solid and homogenous” epistemology (theory of knowledge). “Our task, on the contrary, will be to expose and specify the issue at stake in this opposition, this struggle, this insurrection of knowledges against the institutions and against effects of that kind of knowledges [sic] and power that invests scientific discourse” (Foucault 1980c, p. 87). Foucault claimed that he wanted “to reveal a *positive unconscious* of knowledge”⁷⁸ (Foucault, 1970, p. xi) and about the rules that come into play in scientific discourses. An episteme is, then, a kind of a matrix that regulates knowledge in a specific culture, not by stipulating what is true or false, but what is proper science and what is not. The shift from one episteme to the next takes place abruptly, as mutations (Nilsson, 2008; see also Foucault, 2000i). These mutations are set forth by *events* that are complicated networks of simultaneously acting circumstances, so-called *series* (see Foucault, 1998c; Kendall & Wickham, 1999; Nilsson, 2008). To understand what Foucault actually meant by a shift of episteme is it worthwhile considering how he defined “episteme”:

By *episteme*, we mean, in fact, the total set of relations that unite, at a given period, the discursive practices that give rise to epistemological figures, sciences, and possibly formalized systems; the way in which, in each of these discursive formations, the transitions to epistemologization, scientificity, and formalization are situated and operate; the distribution of these thresholds, which may coincide, be subordinated to one another, or be separated by shifts in time; the lateral relations that may exist between epistemological figures or sciences in so far as

⁷⁷ *Eschatology* means doctrines about death and its aftermath.

⁷⁸ The italics are original.

they belong to neighbouring, but distinct, discursive practices. The episteme is not a form of knowledge (*connaissance*) or type of rationality which, crossing the boundaries of the most varied sciences, manifests the sovereign unity of a subject, a spirit, or a period; it is the totality of relations that can be discovered, for a given period, between the sciences when one analyses them at the level of discursive regularities.⁷⁹ (Foucault, 1969/2006, p. 211)

Episteme, in Foucault's view is not a general worldview that brings together diverse sciences of an epoch. Foucault did not believe in any such great, general truth, and he never built a grand utopia; instead, his research methods steadily aimed at systematically transforming both the researcher and the audience. He saw knowledge as more deeply rooted in error than in truth, and he was more curious about how human subjects are formed through social processes than about constructing his own (normative) theories about knowledge. Consequently, his research more and more dealt with subjectivity and freedom.

Mayo (2000) finds it remarkable that most education-related works about Foucault miss that his later work in ethical self-formation stems from his earlier work with archaeology and genealogy. Instead of only applying Foucault's intermediate studies and focusing on power, Mayo thus considers Foucault's attention to freedom and ethics as "useful anti-foundations to articulate the project of critical thought in education" (Mayo 2000, p. 104). I fully agree with this argument, but since all these methods form a functional unit, it is impossible to apply ethics and skip archeology and genealogy. For me, Foucault's works pursue a continuous line of development and have to be considered as a holistic entity that never was finished but continually advanced by encompassing ever-new elements.

The choice of relying on Foucault's methods is an option that is far from straightforward. He never wrote any research manuals for other researchers to follow because it was never his intention to direct others to follow him obediently. Foucault (2000d, p. 224) himself claims that his suggestions are to be taken as "propositions" or "game openings" inviting interested parties to join in, not as fixed statements. However, Davidson (1986) regards Foucault's ideas as very useful research vehicles and totally opposes those who argue that Foucault's writing are of no help in the search for explanations for specific changes in sciences. Butin (2006), on the other hand, claims that the use of Foucault in educational research has taken place narrowly with the intention of "either liberating us from or entrapping us within our culture's

⁷⁹ The italics are original.

structures and practices” (ibid., p. 371). The argument is that many researchers have been unfamiliar with Foucault’s ideas and, therefore, have both misused and mistreated them. They have actually reshaped Foucault’s theories to suit their own empirical studies. Butin (2006) also stresses that the reader who understands Foucault as a liberator or believes that he wanted to play a trick on the reader has totally missed Foucault’s irony (see also Peters & Besley, 2007; Rabinow & Rose, 2003). A complete error, in my judgment, is to try to use Foucault’s ideas only practically, as tools. Foucault’s ideas are neither reducible to mere technical method, nor are they merely studies in philosophy or history. In his own words, his writings are “philosophical fragments put to work in a historic field of problems” (Foucault, 2000d, p. 224). No quick guide or marked passage is, therefore, available from Foucault’s systems of thoughts. Every Foucault reader has to ask: What does he have to tell me and what use can I make of his ideas? (Nilsson, 2008). And, how much am I allowed to modify his ideas without deforming them? However, Foucault (1980c) calls his works “lines laid down for you to pursue or to divert elsewhere, for me to extend upon or to re-design as the case might be. They are, in the final analysis, just fragments, and it is up to you or me to see what we can make of them” (ibid., pp. 78-79). After all, I can hardly discredit him, since he even declared that he enjoyed distorting the authors he liked and making their thoughts groan, totally without regard for what his commentators might say (Foucault, 1980a). If I like his thoughts, why should I need to be any more truthful to his own outline? Research has to be transformative. Nevertheless, the point of departure needs to be rooted in an understanding of what he meant and in a conscious choice of how to use his ideas without distorting them. In the partial study in Chapter Four, I follow some of Foucault’s general genealogical principles, but do not try to copy his method. In Chapter Five, I follow his ethical approach more faithfully, and in Chapter Six I let him inspire me to a modification of that ethical approach.

Discourse Analyses

In practice, Foucault’s history of thoughts is a study of systematic discourses. There is unfortunately no genealogical counterpart to *The Archaeology of Knowledge*. Gutting (2005), however, looks upon *Discipline and Punishment* as Foucault’s only lasting genealogical exercise and suggests that the researcher interested in using

Foucault's genealogy should follow in his footsteps in that book. Although the first volume of *History of Sexuality* often is regarded as another genealogical study, this book is merely a general introduction to a large project that never was fulfilled⁸⁰ because it was interrupted by Foucault's death. Gutting does not want to regard Foucault's second and third volumes on *History of Sexuality* as genealogy, although Foucault himself suggested so, because the ethical intention in these volumes is much more striking than the historical analyses (Gutting 2005). I do, though, hold these books as useful 'lines' to follow in parallel with Foucault's other works, especially *Discipline and Punishment*. In my research, thus, the approach Foucault employs in *The Use of Pleasures*, Volume Two of *History of Sexuality* especially has much to offer. In this book he presents a research approach that suits my intentions very well. Another useful reading has been *The Order of Discourse*, a small book built on Foucault's inaugural lecture at *Collège de France*. This lecture offers a comprehensive lesson on Foucauldian discourse analysis.

There are many kinds of discourses in a society; some of them are more temporal and concentrate on sporadic problems, as for example policy matters; others are more eternal and universal, revisiting the same concerns, as is the case, for example religious, scientific, or scholarly discourses. So the Bible and texts written by Ancient philosophers are constantly studied and re-interpreted, although the intensity may fluctuate and the viewpoints shift. Various attempts at studying texts takes place under the heading "discourse analysis." There is, however, no clear definition of a proper discourse analysis; the concept is, instead, the focus of complex theoretical debates (Doberty, 2007; Börjesson, 2003). Foucault has decidedly inspired a growing interest in discourse analysis, especially in the humanities and social research. But his interpretation of discourse analysis is much more than the systematically study of particular uses of vocabulary and grammar and word counting that is typical for many forms of what some call discourse analyses.

According to Foucault (1993) almost everything can take the shape of a discourse and can be uttered as discourse. Discourse is like a game, a game of writing, reading and communicating. In order to analyze the discourse's preconditions, games, and effects, researchers have to question their desire for finding a final or singular 'truth' and instead concentrate on and carefully describe what actually takes place in a discourse. Instead of searching for absolute truth, then, they have to search for how

⁸⁰ Only three volumes emerged of the six Foucault had planned.

the so called ‘truth’ is constructed, and to really get to the bottom of this task they need to be aware of the power webs interweaving with and even upholding the discourse, otherwise they will easily stumble and fall prey to the power obstacles at stake (see Foucault, 1993). Discourses form layers of interrelated domains. Yet, the domain of epistemology is connected to practices, politics, and the way institutions are formed (Foucault, 1998d, 1998e). Genealogy is like a tool that helps researchers untie the presumptions of their own cultures and eras through a historical investigation that creates a view of the present from an altered viewpoint. The aim is thus to make the unknown trigger a new and clearer view of what is supposedly well-known by unmasking the hidden connections between the various layers of discourse.

Procedures of Control

According to Foucault (1993), important characteristics of any public discourse are procedures that control, choose, and organize them so that they appear more neutral and thus conceal their aspects of power and threat. Among these procedures, he mentions three *external* actions of exclusion. First are obstructions regulating *what* can be talked about and *where*, but also *who* is allowed to talk. A second excluding mechanism separates participants in a discourse into categories of *acceptable* versus *not acceptable*, where one is permitted and the other disqualified to speak in most situations—although the latter can sometimes be tolerated or even carefully listened to under special circumstances. An example of this is the talk of the insane: under certain conditions in European history, listening to the insane has not been regarded as worthwhile while at other times such discourse has been taken as revealing the truth (see also Foucault, 2001). A third excluding system Foucault mentions is *the conflict between the true and the false*, two steadily differing circumstances maintained by a whole system of institutions and power constellations (Foucault, 1993, 2001). Here the question is about a wish for truth that history performs and institutions distribute, and this ‘truth’ thus stimulates and forces other discourses. To not make the huge mechanisms of exclusion visible, this strong desire for ‘truth’ is kept in silence and well-hidden.

There are, however, not only external procedures acting on a discourse, but also *internal* ones. For example, *principles for classification, organization, and distribution* of a discourse have the aim of slowing down its unsystematic presentation, thus avoiding confusion. Foucault sees the role of *authors* as resulting

from many complex processes; what authors contribute (or not) to discourses are dependent on both the society that has formed them, the particular disciplines they are parts of, as well as on their own more or less random choices at a particular moment (Foucault, 1993, 1998g). When a text grows old or disappears, it is not only the primary text that is the discourse object anymore, but a number of secondary interpretations and analyses have entered the discourse as well. In such cases, the discourse includes all kinds of commentary texts and subsequently the role of ongoing *commentary* role becomes crucial. As soon as the commentaries articulate something other than the original text, they influence and change the discourse and add new dimensions or reveal its essence in new ways. Thus, it is rather impossible to discuss the original text without mentioning anything about *what* it says. The commentary not only reflects earlier commentary but proposes what has been left out. This is, however, controlled inside a particular discipline, where it is not only a question about reinforcing or reshaping a discourse, but about steadily formulating new arguments. The sentences written in a *discipline* have to fit that particular theoretical field's strict boundaries. It is even impossible to know if a sentence is false or true until it has been situated in or by a particular discipline. Despite how accurate a new argument may be, no one will listen to it and take it as true until it is articulated in the right place, as part of the right discourse (Foucault, 1993).⁸¹ For example, trying to argue with a group of biologists against evolution theory is an abortive undertaking, even though the same argument might make sense to religious fundamentalists.

Foucault additionally mentions a third group of procedures controlling discourses; that is control of the rules that have the effect to turning the discourse into a game. This form of control regulates and selects *who* has the right to enter the discourse and become a speaking subject. Many discourses are only open for people who fulfill particular demands and thus require that the people accepted into the discourse are familiar with the common rituals in the actual field (cf. Wittgenstein,⁸² 1953/2001). Those, who want to be heard, have to know and observe acceptable behavior, including the various gestures and games of talk. Particular manners, social rules, and language usages thus become entering codes (Foucault, 1993). The members of a *school* or *discipline*, that is people sharing the same principles, in turn,

⁸¹ Cf. Kuhn (1962) on the issue of paradigms.

⁸² According to Wittgenstein, a word is meaningless without its context of use. The same word can have various meanings dependent on the situations in which it is used. Wittgenstein used the concept "language games" to describe how we give language meaning in daily life.

may accept a great number of new members and thus steadily increase in size. The demands for acknowledging common beliefs may vary, but members have to accept the conclusions that are defining of the group and reject others. The discourse of a school or discipline directs the speaking subjects at the same time as these subjects shape the discourse. Finally Foucault points out the big gaps between different peoples' possibilities for gaining entrance to a particular social discourse, although education aims at reducing such gaps. Education, according to Foucault, cannot avoid supporting procedures for directing and weakening discourses of the kind mentioned above, and thus it nourishes the control and organization of the discourses in question.

Regularity Principles

Discourse analysis built on Foucault's method is based on four principles: (1), *reversal* (turnaround), (2), *discontinuity* (interruptions, breaks), (3), *specificity* (constituting a kind), and (4), *exteriority* (coming from outside):

1. To begin with, according to the principle of *reversal*, researchers have to reject what first comes to their minds and try 'to turn around' what at the outset seems most obvious in the discourse. Instead of concentrating on the author, the discipline, or the desire for truth, they have to try to alter their position and find other ways of searching in order to reveal less obvious *events* or proceedings (Foucault, 1993, see 1969/2006). The primary assumption is that there is no universal or 'final truth' hiding anywhere in a discourse, but many intertwined or distinctly different ones.

2. In line with this thinking, the appealing thing is how the second principle of *discontinuity* influences in various ways the emergence of a discipline or set of ideas. Research then mainly deals with how a new rationality appears and with its diverse effects. Genealogy studies the configuration of discourses both inside and outside the limitations. It is a matter of investigating the fields of particular practices in which discourses turn up, how they develop, under which circumstances they will survive, and what regularity principle they follow (Foucault, 1993). Genealogy, according to Foucault, makes a distinction between microscopic and macroscopic scales of a history. What happens at a larger social scale does not necessarily need to follow the same pattern on an individual scale; instead, different connections, hierarchies, networks of willpower, and several forms of teleology⁸³ interact in complicated

⁸³ Teleology entails goal-directed thinking and action.

networks. Interest does not therefore rest in tradition and other traces of the past but in fundamental transformations. Instead of concentrating on continuity and causality, genealogy defines *series* and their parts, regulations and limits, and also addresses how these series are mutually interlinked.

3. The third principle, *specificity*, implies that it is impossible to break up discourses according to the play of earlier existing meanings and decoding of the world. The world is not there for us to decipher and interpret since the state of the world and our knowledge do not necessarily match (Foucault, 1993). Therefore, discourses challenge things, make them uncomfortable and trigger our curiosity. In a particular practice, a discourse determines principles for its *regularity*; in other words, for the rules to be followed.

4. Finally, the fourth principle, *exteriority*, implies that the researcher has to give up the search for a core idea and instead investigate the discourse both as it appears and its external conditions (what makes it possible). The focus is on how the discourse takes place, what the requirements for its existence are, how its series are formed, and what limits the performance of the discourse. In other words, of interest are the *conditions of possibility* of a discourse: what conditions enable it to come into being.

In sum, these four concepts control the discourse: event, series, regularity, and its conditions of possibility. Genealogy is a distinctive method that pays attention to *events* rather than foundational ‘truths’, to *series* rather than unity, to *regularity* (sameness) rather than originality and, lastly, to *conditions of possibility* rather than to signification or meaning (Foucault, 1993, pp. 36-38).

At this stage the question may appear as to whether genealogy is not simply a kind of critical research. If not, what *is* the difference, then, between critical research and genealogy? Foucault (1993) actually found it difficult to separate critical discourses from genealogy, but he distinguished dissimilarity according to *approach*, *perspective*, and *constraint*. A critical investigation thus concentrates on the principle of *reversal* and tries to identify forms of exclusion, restriction, and receptivity, while the critical researcher studies the roles these mechanisms have or have had. Genealogy focuses on the other three principles, *discontinuity*, *specificity*, and *exteriority*. It studies the configuration of the discourse series and under what circumstances these series have emerged. Genealogical discourse analysis studies

mainly practical discourse formation. However, Foucault points out that the critical and the genealogical approaches have to support each other.

3.2 Research Outline of Chapters Four to Six

The relation of humans to nature and Rousseau's writings might at first seem far removed from Foucault's historical research. Since Foucault recommended not concentrating on the author, my choice to focus on one particular writer might seem especially strange. However, this study will not provide any personal portrait of Rousseau, because there are plenty of them for those interested in his private life, not the least in his own *Confessions*.⁸⁴ Who he was does authorize his texts, but how he wrote and how to read him makes a difference for the commentator, and therefore I will return to this issue. Foucault was cautious about fixed identities;⁸⁵ he viewed identity as steadily fluctuating and taking on many simultaneous shapes. The ideal of identity that Foucault pointed to was one that constantly reshapes itself (see Gutting, 2005). Rousseau was also a very pliant person, always working on his self-transformation. A more close examination of Rousseau as an example of an individual who struggled with himself, his own society, and his own place in history and who theorized these struggles reveals many of the related problems involving power that challenge humanity's relation to nature. Rousseau points out both the conflicts between personal desire and socially related power conflicts. In my judgment, the study of one individual can even contribute a new dimension to Foucault's theory—if the person is carefully chosen.

Foucault will not only be an inspiration to and guide of the methodological approach in this book; I will also employ his philosophic theories. While many of Foucault's thoughts correspond with the focus of this book, I will not hesitate to bring some of them into play as arguments. According to Nilsson (2008), Foucault can be applied in three ways. Firstly, the researcher can use his ideas in a *thematic* way and can implement themes and elements that Foucault discussed in his works in similar or new contexts. Secondly, Foucault can provide the *method*; which means that the researcher employs Foucault's archaeology, genealogy, or ethical approach more or

⁸⁴ Maurice Cranston's Rousseau biography in three volumes is one of many examples of Rousseau biographies.

⁸⁵ In his book on literature, *Death and the Labyrinth: The World of Raymond Roussel*, Foucault concentrated on one person. This book has not been much noted by Foucault's commentators (see Gutting, 2005).

less faithfully. Thirdly, the researcher can use Foucault's theories in a *reflective* way, as inspiration for the creation of one's own methods. In this work, I will use Foucault's ideas in a thematic and a methodical way, and I will use him rather freely and thus even move towards a theoretically reflective application. However, from the very beginning I will point out that Foucault initially focused mainly on discourses related to practices, although his interest gradually turned towards ethical ideas. Even then, however, he saw self-understanding as revealed in one's actions and patterns of actions (Couzens Hoy, 1986). My focus of attention is initially on thoughts and ideas, but moves steadily towards practice, especially educational practice.

According to Foucault (1993) a discourse is a kind of game that takes three forms: writing, reading, and exchange. Instead of avoiding the danger of the fields of discourse, he invites the researchers to question their will to truth, to return the events to the discourse and reveal it in terms of its characteristic power. When I chose my research approach according to Foucault's genealogical and ethical outline this meant that I had to find interesting spaces for investigation and dig and plow through them in ways different than researchers have done before me; or I had to study other objects or find completely unexplored sites and search for what has been buried or swept away. Other features of the technique were to combine my findings in an order other than according to the common concerns with time, discipline, country, and so on. Foucault's genealogy involves stepping beyond, even under such typical concerns and listening to subversive and contrarian words that were only whispered. Where could I find these interesting places and extraordinary objects?

The discourses applied in this second part of my book cover a variety of texts from political writings to fiction and letters. I started by exploring the discourse fields of nature, knowledge and education that Rousseau was involved in by studying diverse types of literature from the centuries preceding him and contemporaneous with him. Subsequently, I have included historical, philosophical, Biblical, educational, and scientific texts, but also fiction from both the Renaissance and the Enlightenment in parallel with Rousseau's texts. The first of the three studies in Part Two of this book investigates the discourses Rousseau was involved in and what influenced him. I will present this study in Chapter Four. In order to study in particular how Rousseau discussed and dealt with nature ethically (Chapter Five) and in connection to education (Chapter Six), I had to consult many of his writings. Yet, as Foucault (1969/2006) argued, it is rather impossible to find a limit to all the production of an author; every writing is more like "a node within a network" (pp.

25-26), as parts of a complex discursive field. In this regard, Rousseau also did not deal with issues individually, in isolation; most of his writings are connected and entwined with more wide-ranging issues. It has thus been difficult for me to choose a particular part of his writings, since nearly all of his writings deals with the topics I wanted to study: nature and education.

Although Rousseau wrote about various topics, certain basic themes and purposes appear in most of his works. It is nevertheless possible to classify him principally as a social critic, although his flexible style made it possible for him to target a very diverse audience ranging from music, to political science, to education, to literature. However, a political message is nearly always present. This mixture of approaches and types of text is due in part to the fact that no strict division existed between different discourse fields in the 18th century. Today Rousseau is mostly called a philosopher, although he was not academically trained but an autodidact. In the 18th century, public intellectuals were called *philosophes* and, as a group, they wrote and openly discussed current social matters. The philosophes were “sophisticated ‘advanced’ thinkers” (Bowen, 1981, p. 169; see also Roberts, 2007) and we should probably label them today as *culture critics* (Dahl, 1992). Another common label that was used for someone like Rousseau was a ‘man of letters’, an epithet for any intellectual and literate man in 18th century Europe. One could describe Rousseau’s role as what Foucault (1998g, p. 217) calls *transdiscursive*. This describes a person whose writings are not examples of a special genre but that have inspired others to write in new ways. Rousseau created new discourse practices and introduced new discourse topics. For Rousseau, writing was also a self-learning activity, a “caring of self.” Writing about the self became widespread during the modern era and a method for actively working on and with one’s own consciousness (see Foucault, 2005).

Rousseau is also an example of what Foucault (2001, 2005), based on Ancient philosophy, calls *parrhesiastes* or “truth tellers”: people who take on the task of enlightening others and who tell the truth despite the risk. A *parrhesiastes* prefers truthfulness towards the self rather than falsifying self to better suit social expectations. *Parrhēsia* relates to freedom and duty, and the individual has not only a special duty in relation to her or his own life, but also to others (see Foucault, 2005). Words must be congruent, then, with conduct. The *parrhesiastes* consider it a moral duty to be openly critical and try to influence other people. By speaking freely to students, the master encourages them to speak freely themselves. Nevertheless, Rousseau knew very well that telling the truth is no road to fortune. Nonetheless, he

saw it as his duty to speak frankly. It is not only his educational thought as such that attracts educational researchers but also his way of constantly writing with the aim of instructing readers on how to conduct their lives, thus awakening others to the need to pay attention to social inequalities.

Nevertheless, I will not use Rousseau's writings only as exemplars of an extraordinary and special thinker, but more as a case or illustration of a kind of thinking that seemed to denote a break with the Enlightenment mainstream. This will also show Rousseau's contradictory role as both a defender and critic of his own society and of some of the most common Enlightenment trends. The study will reveal the conflicts at the time between idealistic aspirations and daily actions.

Application of Principles and Theories

In order to describe more precisely how I will employ Foucault's methods, I will present how I am going to use his regularity principles of *reversal*, *discontinuity*, *specificity*, and *exteriority*. To begin with, the principle of reversal entails that the researcher has to be free from tradition and search, instead, for other approaches. By focusing on education, nature and sustainability, both separately and holistically, instead of studying science, biology, education, philosophy, or some other existing research field, I will try to identify other connections and ruptures than those that already have been investigated in a particular research discipline. Instead of focusing on one discipline, I want to study how various fields act in a person's life and thinking, both individually and collectively. In order to do this, I also need to employ works of Rousseau other than his educational texts. I also want to study how Rousseau contributed to more wide-ranging discourses about nature and education and how these thoughts related to or differed from his ideas about other issues.

Secondly, the principle of discontinuity means that instead of focusing on unities, epochs, or centuries, historical research moves towards disruption. In Chapter Four, then, I am not going to search mainly for typical features of the Enlightenment era but to study more how variable the discourse was, how Rousseau participated in these discourses, and how he often diverged or presented original, although not totally novel ideas. Furthermore, I will try to reveal fruitless trials that did not lead anywhere. A study of discontinuity also includes searching for *series of events* in Rousseau's thinking and theories and examining how these series work inter-

dependently in networks while also acting separately and independently. Following the principle of specificity implies that I do not have to split the discourse into a game of formerly recognized meanings and rearrange it accurately in congruence with a given pattern. Instead, I have to find my own way of exploring and arranging events according to how they appear to me as a result of new matrixes that I will observe. The exteriority principle designates that external features have an effect on discourses. This means that I also need to study the ‘conditions of possibility’ and search for contextual circumstances that have influenced Rousseau’s writing and made it either possible or impossible for him to contribute to advancing a particular discourse.

What I also want to do in this discourse analysis is to investigate the power configurations entangled in a person’s relation to nature, epistemological stance, and educational outlook—Rousseau’s own, and as seen through the eyes of the fictive characters he created. In addition, I will explore how Rousseau dealt with nature in his theories, praxis, and in educational discourses; how and where these discourses concerning nature and education took place and in what way Rousseau has been involved. What did the discussions deal with and what did they hide and remained silent? There is not only one discourse to discover, but many separate ones that sometimes converge and sometimes diverge and move in different directions. When exploring Rousseau’s writings I discovered that these directions can be both abstract and concrete because Rousseau was not one to remain still: he was very often on the move, traveled and walked by foot from place to place, lived in various places, and also moved to and fro between different contexts in the same physical area. This is also significant in his fiction. In addition to moving physically from place to place he also moved mentally from space to space, and this becomes obvious in his writings. He also created literary and imaginary spaces within which to move.

In line with Foucault’s studies of sexuality I will also include *freedom* as a main focus. The connections between Rousseau’s and Foucault’s technologies of the self show unmistakably why Foucault cannot only shape the methodological bases of this research; his ideas also have other more fundamental roles to play in the content and conclusions of this thesis. I have actually chosen Foucault’s most recent ethical studies as models for the analyses in Chapters Five and Six. Rousseau wrote many of his texts to stimulate critical reflections on society, on education, and to inspire improving readers as ethical subjects. His texts therefore have an “ethopoetic” task similar to the texts Foucault investigated in his studies of sexuality (see Foucault,

1997d, p. 209; Foucault, 2005). Following Foucault's outline for his studies in the second and third book of *History of Sexuality*, my studies in the following chapters thus concentrate on how humans relate to nature in Rousseau's personal experiences and fiction, as well as his accounts of them in his educational and political writings. Rousseau tried to lead his readers in the same self-transformative projects that he himself was involved in, and he sketched out his thoughts using various literary styles. The intent of Foucauldian research is "to define the conditions in which human beings 'problematize' what they are, what they do, and the world in which they live" (Foucault, 1985, p. 10); that is to find answers about *how*, *why*, and *towards what ends* they think and act as they do. This includes an attempt to study how persons carry out their lives and seek to transform themselves and others and establish rules that aim at changes in ethics, aesthetics, and in both discursive and non-discursive practices. Castel summarizes this method of problematization in two sentences:

Problematization is not the representation of a preexisting object, or the creation through discourse of an object that does not exist. It is the totality of discursive and non-discursive practices that brings something into the play of truth and falsehood and sets it up as an object for the mind. (Castel, 1994, pp. 237-238)

Reading Challenges

Most of Rousseau's creative and intellectual output, including letters, books, declarations, and so on, combined speech and written language to challenge and open up different forms of discourses to one another. His oeuvre was also a fusion of lived experiences and dreams, and profound theoretical reflections. But, it was obvious to Rousseau that by writing about himself, thus revealing his self, he had to stipulate a limit between *me* and the *not-me*, and *me vis-à-vis others* (Foucault, 1998b; Marshall, 1996). The self must be made into a subject for examination and simultaneously made into an object for study. He had to both create and affirm himself as a subject through the process of writing and to present a picture of himself as an object in a twofold self-splitting task. This becomes most obvious in his autobiographies and letters.

So, although Rousseau's language may sound plain, the profundity of his message does not necessarily emerge easily after the first quick reading. Rousseau's

stories are written poetically; they are multilayered and the stage shifts constantly between real, allegorical, and utopian spaces, individual and social perspectives, practices, and ideas, and they mostly have both an unmistakable instructional and a critical motive. Rousseau himself warned that readers have to read all he has written to understand his *system* (see RJJ). My reading is not that complete but thorough and has finally convinced me that he wanted to present a grand theory—not many small separate stories about political philosophy, educational methods, or social criticism and to write love stories, musical compositions, pamphlets, etcetera, from the perspectives of that grand theory. A piecemeal reading of Rousseau can be beneficial, but it serves other purposes than I have in this study. While some of Rousseau's narratives are complicated and dense, I am aware that my attempt at distilling key themes and concerns can be deemed as amounting to only a fragmentary grasp. But my intention is to open up a more extended discourse based on the findings of the present book. To be honest, when I started to work on this book I did not yet understand how much actually was contained in Rousseau's concept of nature and how much he had written on the topic. Now, I am better informed in this respect and realize that this book can only be a launching point into that concept. My plan has not been to reveal any final truth about his “grand theory,” but I have decided to try to grip *why, how and the purposes for which* Rousseau constructed this ‘system’.

The Rousseau reader has to consider his writing style as more than a tool by which he clearly expressed his ideas. May (2002, p. 262) has a point when she calls the *1st Discourse* “an intellectual or ideological game play in which the *philosophes* liked to indulge.” Rousseau wrote creatively; while he did not call himself a philosopher and did not like to copy philosophers' writing styles (see Dent, 1988; Starobinski, 1988). According to Dent (1988), Rousseau had few gifts as a systematic thinker, but he adds that if we make an effort and read him thoroughly we will find unity in his thoughts. His art was not systematization, but rather teasing and probing, and such a talent could also be called a special gift. When reading any of Rousseau's texts, we should not forget his flair for sarcasm and dramatic irony, even if he was not the only ironic writer in the Enlightenment era. But his ironic style was only one of the many he employed to express what he called his ‘system’ of thoughts. He was a complex thinker with a specific *writer's voice* capable of handling many stories simultaneously and of splitting his own personality as author into many concurrently acting subjects. He also regularly used a great number of sophisticated literary techniques in his art of writing. And he never chose the easiest course; when he

described utopias, he put the facts aside and painted more than one visionary picture (Shklar, 1966/2006).

My first intention was to discover how and where he talks about nature in one way or another. Therefore, I read all his main writings,⁸⁶ books, discourses, and a great deal of his correspondence. The more I read, the more I found. The main works in my first reading were: *The Social Contract; or Principles of Political Right*; *Émile, or on Education*; *Discourse on the Sciences and Arts*; *Discourse on the Origin and Foundation of Inequality among Men*; *Confessions of Jean-Jacques Rousseau*; *Julie, or the New Heloise*; *Reveries of the Solitary Walker*; and *Botanical Writings*.

Rousseau regarded *Émile* and *Julie* as cornerstones of his philosophy, although they were not written as political texts. The third of his major books is *The Social Contract* that he wrote at the same time as these two novels. Ambjörnsson (1977) calls *Émile* and *Social Contract* twin stories, although one is about politics and the other about the education of chiefly one individual. I consider *Émile*, the *Social Contract* and *Julie* to be a triad and the culmination of his intellectual work. *Émile* also has direct connections to the two first discourses, which could be called the great opening of his entire writing career,⁸⁷ of which the *Dialogues* and *Reveries* are the grand final and *Savoyard Vicar* (a part of *Émile*) a distillation. His *Botanical Writings* differ from all the other works listed above by being the most scientific and concrete, as will become clear in Chapter Six. In the beginning of the Chapters Five and Six I have explained more in detail which writings I mainly draw upon. I have also compared my conclusions with the interpretations of Rousseau by other researchers.

After this first overall reading, I decided which sources to use for Chapters Four, Five, and Six. First, I analyzed how his thoughts correlate with those of other writers; then I tried to disclose and elucidate his nature ethics. My third interest was to focus on his educational approach to nature.

I am capable of reading Foucault and Rousseau only at a very basic level in their native French. To compensate for this, I have tried to read all main texts in at least two translated versions, mainly in English along with translations in Swedish, my

⁸⁶ When I refer to Rousseau's main works in brackets, with a few exceptions I use Dent's (1992) abbreviating symbols. The two discourses, *Discourse on the Sciences and Arts* and *Discourse on the Origin and Foundation of Inequality among Men*, I refer to in short form as 1st D and 2nd D. For other of my references, I use a short form of the book title listed in the Rousseau part of the Bibliography at the end of this book.

⁸⁷ It was not his first publication but was the one that made him famous. He had composed a comedy and written articles about music before that. I have not been able to deal with Rousseau's musical production in this book.

mother tongue, and in Finnish or German when I have found it necessary. When possible, I have also compared two different editions of the same language. If needed, I have compared the translation with a version in the original French language. Then I have used the Bibliothèque de la Pléiade version from 1959-69 of *Oeuvres Complètes de Jean-Jacques Rousseau*. I have cited the quotations mainly in English, not in both English and French, for two reasons: firstly, the text becomes more convenient for the reader of English and, secondly, this research is not “formal concept analysis” concentrating on particular concepts, and I have therefore not usually presented the quotations in French. But in cases when it was important to show the original French, I have also added the French text in a note. The English version I primarily have used is Christopher Kelly’s edition of *The Collected Writings of Rousseau*. However, it did not include all the texts to which I wished to refer. Nevertheless, I am aware that translations sometimes suffer from lack of verbal precision in comparison to their original formulation and have tried to avoid this by double checking and careful choosing the English versions.

Rousseau’s commentators have produced a huge number of writings, and it is almost unworkable to do justice to all the many worthwhile studies of Rousseau’s thoughts. My choices of secondary references have, firstly, concentrated on texts available in English and, secondly, focused on texts in the categories of educational and political thoughts. A main secondary source has been a series of four volumes, *Jean-Jacques Rousseau: Critical Assessments of Leading Political Philosophers*, edited by John T. Scott and published in 2006. This series includes a compilation of 73 earlier published essays about Rousseau’s political philosophy. The oldest dates back to the beginning of the 20th century and the newest are of recent vintage. I argue that contemporary educational research does not pay enough attention to the central role of Rousseau’s educational theory in his entire literary production, and it has likewise failed to address his multidimensional writing style enough. I have, therefore, tried to give short presentations in the beginning of Chapters Five and Six of all the basic texts I have employed, and I draw attention to his thought-provoking writing style and how his texts can be varyingly read.

As with Rousseau’s texts, when possible I have also read the main works of Foucault in two translated versions. In addition to his main books mentioned above and his *The Order of Things*, I have devoted special attention to *The Hermeneutics of the Subject: Lectures at the Collège de France 1981-1982* that includes a thorough explanation of the Hellenistic and Roman notions of “care of the self.” I have also

been inspired by Foucault's essays and interviews in Paul Rabinow's series *Essential Works of Foucault 1954-1984*. In addition, I have read analyses of Foucault by many leading secondary sources. In addition to my initial intention to let Foucault inspire the method, I also decided to let him in as a discussion partner in the entire Rousseau study whenever it could be done.

Inquiry and Order

The main purpose of this book is to discuss the pedagogical implications of an education that can challenges humankind's ethical relation to nature today by answering two questions. First, *what ethical dimensions are challenged by the enigma of sustainability?* And, second, *what kind of education do these dimensions require?*

My first research strategy, as applied already in Chapter Two was a critical reading of key literature in environmental education, environmental philosophy, and the history of education. The second phase of this study employs Foucault's genealogy and ethical research approaches in a case study of Rousseau. This second phase relies on an analysis predicated on three questions, which I label I, II, and III:

- I. What discourses about nature, knowledge and education inspired Rousseau?
- II. What were Rousseau's ethics in relation to nature?
- III. What is the role of nature in Rousseau's educational philosophy?

I will describe the purpose of these questions and how I will undertake the research according to these questions more thoroughly at the beginning of Chapters Four, Five, and Six, in anticipation of the studies in those chapters. Chapter Four provides a background to the studies in Chapters Five and Six and draws from many sources. I will firstly carry out a simplified customized genealogical discourse analysis. The investigation in that chapter is called "Rousseau in modern discourses about nature and knowledge" and answers question number I: *What discourses about nature, knowledge and education inspired Rousseau?* In this study I have surveyed many books and articles that shaped ideas about nature, knowledge, and education. The selected literature includes philosophy, history of ideas, history of science, history of education, novels, encyclopedias and the Bible, among other sources. Since Rousseau not only interacted with contemporary writers but also replied to earlier ones, the

study starts in the 16th century. The content is divided in four parts focusing on different layers of discourses involving the concepts of both nature and knowledge. Shaped with the help of Foucault's genealogy, this study observes his regularity principles for discourse analyses. Of interest is how knowledge and "nature" became powerful influences that generated social politics and education and how Rousseau participated in discourses on these topics. The so-called 'scapegoats' from the previous chapter emerge again for more in-depth scrutiny.

In Chapters Five and Six, I concentrated on mainly Rousseau's writings in answering the second and third questions. Table 2 below outlines the reading and the research approach taken in these chapters, and why I recommend an alternate reading of the diagram and the text below. The study presented in Chapter Five is a modification of Foucault's ethical method and the study in Chapter Six, in turn, is a modification of the approach taken in Chapter Five.

Chapter Five is entitled "Rousseau on nature and ethics" and answers question number II: What were Rousseau's ethics in relation to nature? To answer that question, I have analyzed how Rousseau described humans' relationship to nature on an ethical level. It focuses on Rousseau's vision for the self-education of individuals who are free, virtuous, and responsible members of society. He asks for an ethics by which human beings problematize what and who they are and that define the conditions which are natural for humans; how to relate ethically to their fellows and the natural world in which they live; and how to think and act. The Fifth Chapter thus comprises Rousseau's vision of how individuals ought to relate to themselves as ethical and natural subjects and how best to discover their roles in this relation. The question is problematized by using four fundamental sub-questions that deal with the second question in terms of ontology, deontology, ascetics and teleology:

1. What is the ethical substance of Rousseau's conclusions about the moral conduct of human beings? (Ontology)
2. What *modes of control* (i.e., subjection to rules) do humans have to undergo to live in tune with their human nature, according to Rousseau? (Deontology)
3. What *forms of conduct* or *manners* do individuals have to choose in order to transform themselves into more 'natural' humans, according to Rousseau? (Ascetics)
4. What should *the ethical goal* be towards which individuals should strive in actualizing their moral selves, according to Rousseau? (Teleology)?

Chapter Six answers question III: What is the role of nature in Rousseau's educational philosophy? In this chapter, I have employed Foucault's methods in a reflective way to raise new questions about education similar to those raised concerning ethics in Chapter Five. Of particular interest is the relation (if any) between knowledge and praxis, and what makes education ethically defensible. Rousseau was convinced that the world could be a better one and he was strongly motivated to influence others with his ideas to that end, but he also wanted to live his own life in a morally uplifted way. He pursued this prospect in many different ways; not only by writing educational texts, but also through correspondence, political writings, fiction, and by participation in the polemics of his age. For example, he instigated controversy, proposed provocative thought experiments, offered instructive examples using himself and fictive persons as models, shaped visions, proposed concrete plans and descriptions and, last but not least, raised his critical voice whenever necessary. In addition to his attempts to influence others through his words, he also uncompromisingly sought to be a role model, an aspiration that becomes clear in what he wrote about himself.

I will try to reply to question III using the conclusions reached regarding question II and I have problematized areas that connect both questions with each other. Thus I will try to disclose Rousseau's educational endeavor through his ethics. The sub-questions of question III relate both to the problematization of question II and to the discussion about environmental education in Chapter Two.

1. What is the essence of a 'natural education',⁸⁸ according to Rousseau? (Ontology)
2. What did Rousseau believe that education could do to encourage people to adopt particular *norms* or *rules* regarding their relationships to nature? (Deontology)
3. If we follow Rousseau, can education promote conduct that is more in tune with nature and, if so, how? (Ascetics)
4. What are the *aims* of an education that promotes the development of more 'natural' humans? (Teleology)

⁸⁸ Rousseau called the education he envisioned in *Émile* "l'éducation naturelle" (OC IV, p. 267), translated as "natural education" (e.g., E, p. 52; Rousseau, 2007, p. 26). He also mentioned that certain circumstances are "dans l'ordre de la nature" (OC IV, p. 611), which has been translated as "according to the order of nature" (e.g., E, p. 298) or "in accordance with nature" (e.g., Rousseau, 2007, p. 275).

Areas of Concern and Levels of Writing

I focus on Rousseau's ethical theory (in Chapter Five) and educational theory (in Chapter Six) in terms of four areas of concern. When the words "nature" and "natural" are interpreted according to Rousseau, and if the way humans relate to nature is viewed from a current sustainability perspective, these four areas of concern can operate separately but even more so interactively. I have identified these four areas as influenced by Foucault in accordance with what I have distinguished in reading Rousseau. I have divided Rousseau's ethical theory into four areas of focus:

1. How ought individuals who are following their natural inclinations to relate to themselves and other persons?
2. How ought they to relate to and participate in the creation of society and human communities?
3. How ought they to relate to the natural world?
4. How does Rousseau think they ought to relate to the Cosmos and the Divine?

I use the expression 'ought' since Rousseau's language treads on the dividing line between normative endorsement and visionary dreaming. The study of Rousseau's educational theory is correspondingly divided in four areas of concern:

1. His recommendations concerning the education of a natural individual.
2. His views on the best ways to educate a natural citizen.
3. How to promote knowledge of the natural world.
4. How to encourage love of the Divine in nature.

The scope of Rousseau's project was wide and his writing style multifaceted. His texts are diverse in form and type, and they simultaneously incorporate many meta-levels of meaning. In this respect his writing is similar to poetry. I have therefore divided his texts into a five-dimensional scheme representing five major levels I identify in his writing. These five levels emerged, first of all, from my own reading of Rousseau's text and, secondly, from a certain agreement I found between my own understanding of Rousseau and Broome's (1963) reading of *Julie*.

First, the story exists on a *physical* level: descriptions of places, activities, and physically expressed affections in the real or fictive domains, and critiques of what

actually happens. Second, the story takes place on a *mental* level: thoughts and descriptions of real or fictive feelings. The third level is *theoretical*: proposed ideas, provocative thought experiments, future or utopian perspectives, and fantasies. The fourth is an *allegorical* level: symbolic expressions of morals, politics, and the like. Finally, it rises to a *metaphysical* level that involves mainly religious thoughts and perspectives. These five levels constitute the theoretical platform upon which I will analyze Rousseau's texts. Actually, the levels intermingle and intersect in ways that are sometimes more or less obvious but that are completely hidden at other times. In addition to these five levels, Rousseau's writings typically have an educational and critical social purpose.

A good example of this complexity is the book *Julie, or the New Heloise*. While all these levels are present, it is still possible to read the book simply as a love story and to concentrate, accordingly, on the most obvious levels of reality. A noticeable matrix in *Julie* that the reader without any other ambitions than entertainment can thus fail to notice is the direct resemblance between the individual, the family, and society that strike a chord reminiscent of both Plato and Aristotle. Another possible interpretation of *Julie* that does not directly emerge is to read it as an allegory of the genealogy of humankind in accordance with Rousseau's 2nd *Discourse* (see Broome, 1963). In the short sentence "The mountainside is steep, the water deep, and I am in despair" (JNH, p. 76) the connection between scenes of nature and strong feelings becomes quite clear. Rousseau's descriptions of nature are often more than depictions of particular locations: they symbolize feelings and states of affairs. Therefore, I want to point out that this division into physical and mental levels does not constitute a dualistic system. I only want to differentiate between the visible aspects of the physical world and the inwardly invisible and subjective experience of it; for example, in *Julie*, Rousseau often describes inner landscapes (feelings) by setting the situation in an outer landscape (natural world) that reflects the same features (calm, cold, sunny, etc.). My intention is not to break the stories into pieces and list their fragments but, rather, to reflect on Rousseau's stories as multidimensional networks simultaneously incorporating reality and dreams, hope and hopelessness, the past and the future; and to show how Rousseau's complex writing style challenges the reader.

The more or less skillfully hidden matrixes and multiple meanings in Rousseau's stories all serve the same purpose: to reveal Rousseau's 'system' of thoughts to a broad public (see Broome, 1963). Many of Rousseau's works have a strong utopian

character. It is obvious that Rousseau had mastered key literary techniques.⁸⁹ His use of language was not simply a descriptive or discursive tool but also an art aspiring to an aesthetic outcome. Rousseau used *aphorisms* and *paradoxes* to cite multifaceted truths, which he more or less noticeably tried to synthesize into a holistic picture (Payne, 1892/2003). Awareness of Rousseau's complex writing style at least alerts one to delve deeply in understanding his texts. Salkever (1977-8/2006) distinguishes two kinds of paradoxes in Rousseau's language. Firstly, he uses paradoxes as a statement that is strongly contrary to conventional held belief, somewhat resembling some of Socrates' arguments in Plato's dialogues. Such paradoxes have constantly shocked many of Rousseau's readers and many have thus looked upon him as either shrewd or inane. By experimenting with completely contradictory views Rousseau most certainly wanted to show the moral failings and errors of contemporary views and practices (see *ibid.*). Secondly, his use of paradox also engages two contradictory views simultaneously; for example in the 2nd discourse. Philosophical paradoxes can either be presented as dilemmas to be solved or to highlight conflicting features of a particular issue. According to Salkever (1977-8/2006), most of Rousseau's paradoxes are of the latter kind, but I find him often walking a fine line between vision and practice and, therefore, even the paradoxes become paradoxical.

Rousseau was also a master of the technique of the *thought experiment*, although this term was not in use at his time.⁹⁰ Thought experiments have been used for thousands of years in different fields (Gendler 2002) and for different purposes. They strive to challenge the understanding of a common situation by bringing a new view of the phenomena into focus (Häggqvist, 1996), and they are a kind of intellectual game of language play among philosophers (*ibid.*), but scientists also use thought experiments. In philosophy a thought experiment presents a fairly detailed but physically unrealized (even unrealizable) scenario (see Gendler 2000; Brown, 2004). It is an "imaginary scenario with the aim of confirming or disconfirming some hypothesis or theory," according to Gendler (2002, p. 388). These descriptions very well suit Rousseau's intentions with the 2nd Discourse, *Émile*, and the *Social contract*. It is obvious that his thought experiments strive to change common understanding of a situation by offering a new view. Thought experiments can provide a possible solution for testing a situation that is impossible to perform in

⁸⁹ He used techniques such as juxtaposition, wit, overstatement, simile, metaphor, even extended metaphors.

⁹⁰ According to Brendel (2004) the concept 'thought experiment' was mentioned for the first time in 1811, which means about half a century after Rousseau's era as an active writer.

reality for some reason, but a thought experiment has to be supported by empirical data, otherwise it would not be possible to use it to explain what it aims to do (De Mey & Weber, 2003). This is exactly Rousseau's technique: in his thought experiments, he uses the findings of others and also illustrates using the data of his own experiences, his own life.

Lanson (1912/2006) reminds the commentator on Rousseau's texts that Rousseau was not an author who limited his thoughts to abstract theories. He did not present a methodically and logically constructed formal system that skillfully avoids all contradictions. Instead, he purposefully and controversially featured such contradictions in his de facto "system". His thoughts were shaped by daily life with all its up and downs, both emotionally and physically and flavored with emotions and imagination, where new thoughts replaced old ones that sometimes remained uncorrected. Lanson's useful advice on how to read Rousseau's texts can help understand him, de facto:

Carefully weigh the sense and important of the texts and consider their spirit more than their words. Do not impose inferences on the author, as easily deduced as they may be, as an integral part of his own thought since he might have declined to make them, and definitely do not substitute the deduced inference for the thought itself. Distinguish the unequal worth of the ideas he expresses, and do not treat as equal in worth and comparable, or compensatory, a maturely thought-out chapter and a witticism, the cry or complaint of a personal letter written under the pressure of a specific circumstance or the fever of an emotion. Do not thoughtlessly introduce arbitrary suppositions into our reasoning about the meaning of a text. (Lanson, 1912/2006, pp. 11-28)

I will mainly try to follow Lanson's (1912/2006) advice and not treat Rousseau's texts as theoretically formal but, instead, as simultaneously abstract and rebellious, purposefully triggering wide-ranging considerations about common affairs in the world. Rousseau himself says that reading his books "require[s] constant attention" and that to follow their thread "one must reread with effort, and more than once" (RJJ, p. 211). I have followed that advice and have tried to be aware of his blend of imagination and normativity.

3.3 Conclusion

In the second part of this book I will employ research methods inspired by Foucault. Many of Foucault's arguments correspond with the concerns of this study and some of them are brought into play when and where relevant. According to Nilsson (2008), Foucault can be employed in three ways: thematically, methodically, and theoretically. In this work, I will use Foucault in all three ways.

The relation of humans to nature and Rousseau's writings might at first sight seem far from the topics of Foucault's historical research. However, a closer examination reveals many similarities between the dilemmas and challenges facing human beings in relation to nature, and the topics of Foucault's research, such as sexuality, madness, and punishment. As is also the case with these issues, the problems of nature and sustainability are strongly associated with human beings; furthermore, they all turn out to be linked to knowledge and education. They are even all connected to daily human life, both as an individual and social condition, and always have been. In addition, they are all linked to issues of power and freedom. The Foucauldian perspective can also help me confront the power/knowledge paradigms that buttress the conflicting discourses concerning environmental education and education for sustainable development.

In sum, the following three chapters deal with how Rousseau viewed human life in relation to human nature and the natural world. Chapter Four uses a kind of genealogical discourse analysis to shape a framework of the discourses in which Rousseau was engaged. Chapter Five is a modification of Foucault's ethical method and focuses on Rousseau's view of the human relation to nature. And, Chapter Six is a further modification of the method used in Chapter Five and deals with Rousseau's educational theory.

Table 2. Research outline in Chapters Five and Six

Research Question II	Areas of concern	<i>Problematization of Rousseau's 'nature ethics'</i>				
		Human relation to self and others	Ontology	Deontology	Ascetics	Teleology
		Being social	What is the <i>ethical substance</i> of Rousseau's conclusions about the moral conduct of human beings?	What <i>modes of control</i> (subjection) do humans have to undergo to live in tune with their human nature?	What <i>forms of conduct or manners</i> do individuals have to choose in order to transform themselves into more 'natural' humans?	What should the <i>ethical goal</i> be towards which individuals should strive in actualizing their moral selves?
		Humans in the natural world				
		Nature for worship				
<i>Rousseau's levels of writing</i>		Physical	Mental	Theoretical	Allegorical	Metaphysical
		<i>Problematization of Rousseau's 'natural education'</i>				
Research Question III	Areas of concern	Creating the natural individual	Ontology	Deontology	Ascetics	Teleology
		Educating the citizen	What is the <i>essence</i> of a 'natural education', according to Rousseau?	What did Rousseau believe that education could do to encourage people to adopt particular <i>norms or rules</i> regarding their relationships to nature?	Can education promote <i>conduct</i> that is more in tune with nature and, if so, how	What are the <i>aims</i> of an education that promotes the development of more natural humans?
		Educating about the natural world				
		Educating for love of nature as a reflection of divinity				

4 Modern Discourses about Nature and Knowledge

The previous chapter presented Foucault's research methods and the strategies that I will employ in my study of Rousseau in the upcoming chapters of this book. The present chapter works out a picture of thoughts and events that in one way or another relate to the thinking of Rousseau, and it focuses especially on the role of nature and knowledge as elements in discourses from the centuries before and during Rousseau's life. My particular intention is to search for power constellations involving nature and knowledge, both theoretically and practically, and to discuss how Rousseau addressed them. By this approach, I will uncover the conditions that made Rousseau's thoughts possible and notable.

For clarity, I have divided the chapter into four parts. The first part (4.1), *Methods and Theories*, describes how this study applies some basic ideas and theories of Foucault. The second part (4.2), *Towards Enlightenment with Nature as Guideline*, traces how humans' relation to nature and knowledge started to gradually change and generate countless new ideas in the centuries before Rousseau. It also reveals how all these newborn ideas later culminated in a chorus of critique, and it gives a glimpse into how Rousseau related to this miscellany of discourses. The third part (4.3), *Reshaping the World*, portrays several more or less groundbreaking changes that took place in how humans related to the world and gives examples of phenomena that were regarded as "natural" during the 18th century. The final part (4.4), *New Learning*, focuses on the increased pursuit of education and knowledge that took place, starting with the 16th century and continuing to and through Rousseau's era.

While shaping a background is a long and complex story, I will concentrate on basic elements and a few characters that have had an impact on the creation of the modern world and thus situate Rousseau's ideas in an endless network of discourses. With this strategy, I want to identify the situations and discourses in which the concepts of "nature" and "knowledge" appeared and to feature the great diversity of arguments that leaned on these concepts. I will mainly focus on European trends and methods from the 16th century until the time of Rousseau's death in 1778; thus, I will

neither deal with the revolution in France nor in America, nor discuss the industrial revolution, nor enter deeply into political disputes. The presentation will nonetheless deal with both philosophies and practices.

4.1 Methods and Theories

The question this chapter tries to answer is: What discourses about nature, knowledge and education inspired Rousseau? Methodically the review applies Foucault's genealogy and studies the power constellations that shaped knowledge and conceptions of nature during the early modern time and the role of Rousseau in these constellations. To study these power phenomena methodically, I use the regularity principles Foucault suggested. Firstly, the principle of *exteriority* is the main sustaining force of this chapter and searches for influences on Rousseau's writings by investigating the network of discourses in which he was involved or implicated. Secondly, the story in this chapter builds on the principle of *reversal*, which means that the researcher has to enter the issue from an altered position. The position chosen combines three angles: nature, knowledge, and Rousseau. Plainly speaking, I will study the discourses about nature and knowledge jointly and in relation to Rousseau.

According to the third principle, *discontinuity*, I will search for how new disciplines or sets of ideas emerged. To succeed in this task my study seeks discourses related to the concepts of nature and knowledge from many various perspectives. In focus are both discourses prior to and contemporaneous with Rousseau. Firstly, the texts consulted contain original works written by philosophers and scientists, such as books, essays, letters, and novels. Secondly, the study material contains various historical texts about modernity, the Enlightenment, education, religion, science, childhood, and special books, such as Scripture. The reading of all these sources has taken place in parallel with my reading of Rousseau's main books and of some of Foucault's books, especially *The Order of Things*. Finally, the fourth principle, *specificity*, has inclined me to use this diverse material to find new matrixes diverging from those usually employed and to twist them together in new constellations. However, I have also felt free to partly skip Foucault's guidelines and follow more traditional patterns from the history of ideas or classical history, if this seemed useful. A crucial determinant, however, has constantly been the connection to Rousseau's thoughts. (See more about the regularity principles in the previous

chapter). To make the course of the investigation more clear, I need to describe Foucault's view of power.

Power as Games of Strategies

The way Foucault reflect on power differs from common sense concepts and the focus of his studies is, in fact, the 'how' of power. To relate the mechanisms of power to two limits, he investigated "the rules of right that provide a formal delimitation of power" and "the effects of truth this power produces and transmits, and which in their turn reproduce this power" (Foucault 1980c, p. 93). With these words, he means that discourses as well as all kinds of other practices in society constitute a huge number of power constellations. Therefore, the dilemma is threefold, consisting of power, right and truth, and all three strongly intermingled (ibid.). Power is therefore not a singular element acting alone in a special direction. The concept of "power" implies a diverse and prolific system of power relations that act immanently in particular fields of the entire social organization, and it is basic to the conduct of collective (social) games (Foucault, 1980b, 2000i). Power is not an institution or a structure; it is a multiple strategic condition in a particular society; it can emerge from anywhere, exist everywhere, and be present in a variety of connections between two points. Accordingly, power is not only a top down mechanism; and it is much more than simply repression or the mobilization of negative forces.

The state is a kind of superstructure related to many other kind of joint power structures making demands on the human body and these joint structures include entities like the family, kinship, sexuality, knowledge, economy, and technology (Foucault, 1980b). In addition, knowledge is innate in all potential power relations, since power and knowledge are each other's preconditions. Power is a social strategy that creates both knowledge and individuals, but knowledge, in turn, also creates power. Power leads members of society to participate in the production and reproduction of truth, in which power, truth, and rights are interdependent. Yet, where there is power there are also opposing forces of power in tension with it (e.g., Foucault, 1980b). To give an example: When considering the discourse about the use of the preposition *for* (education *for* the environment) described in Chapter Two in the light of Foucault's view of power/knowledge, the different discourses involved can be seen as power struggles. In these struggles, certain concepts hold rhetorical

power and dominate general discourse by claiming to be the ‘truth’, while critical voices try to attack them as ‘false’ or mistaken. One easily enters such discourses unconscious of one’s own role in what is always a complicated power struggle (see Ferreira, 2009; see also Chapter Two in this book). The situation rapidly develops where one cannot see the forest for the trees anymore.

Such counter-forces are rather immediate reactions to the allocation of power in a power constellation and they therefore have a productive role to play (Foucault, 1978; 1997f). From this view, power is a force that acts on many levels at the same time. Power is not permanent, but malleable and changes shape and focus constantly. Although power is directed towards a goal, it does not need to be a goal of a particular person. Foucault meant that people cannot act totally apart from the various power networks of which they are parts, but they can be more or less in compliance with the power networks that involve them. Accordingly, various power networks divide not only groups and societies, but also individual’s states of mind. To deal with such contradictions, these discourses offer competing alternatives: a discourse, on one hand, can purposefully strengthen particular powers and, on the other hand, mute others.

Foucault (1980c) emphasized the study of power at its extreme points, where it is most indistinct. This kind of approach does not include questions about ‘who’ or ‘what’ institution holds the power and what the ‘aims’ are of the persons who hold power but, rather, ‘how’ power is implemented in praxis and how it relates to its ‘objects’. The word ‘object’ may sound as though some person dominates others and makes them into objects for power to manipulate, but the personal role of an individual may differ from being a target of power to being its source. This dual capacity was, as we will soon see, the fate of Rousseau. This is also something that seriously complicates our present roles as responsible actors in a sustainable society. We are simultaneously subjects and objects in an unsustainable practice of living. Even if we feel manipulated and victims of others’ profiting, we steadily participate in the global oppress of both certain groups of humans, not to mention other species.

The concern of *The History of Sexuality* has much in common with this particular research. The presence of power is obvious in the creation of knowledge, but its presence is also felt in educational strategies and practices. Similarly, power influences the relations humans have with nature. And, as with sexuality, the relation of humans to nature can become an occasion for power conflicts between men and women, old and young, adults and children, and the conflict can even afflict the

individual. The biggest conflict is probably the dualist separation of mind and body, where the body is counted as the evil part of the human being, the part belonging to nature, in opposition to the rational and holy mind. However, Foucault (e.g., 1978, 1998c) points out that the body is not a constant; it is an object of power that varies in time and space because it is constantly shaped culturally and re-constituted. Power works, for example, in situations where teachers meet their students, priests their laity, and an administration its population. Peers with different wants and desires use power to persuade each other, and the different modes of being human taken on by the same individual at different times each come with different involvements with power. Additionally, power becomes visible when humans exploit other biological creatures and, in return, the power of other creatures, even non-living nature, has an impact on human life. And, as with sexuality, humans' relations with nature play an active role in society and can intentionally be used for many purposes.

When it comes to power, Foucault (1978) encourages searching for the matrices power follows in its various interactions, rather than concentrating on who holds power, or who has the right to acquire knowledge. The reason for this focus is that power relations only reveal momentary parts of larger processes built up over many years; nodes at which the active parts interact have changed numerous times. However, humans' relationships with nature may be an exception because there appear to be clear, long-lasting manifestation of power in the human regard for nature (see, e.g., Suutala, 1990; Chapter Two in this book). Power has also been a variable over the ages that cannot be neglected as regards age and gender groups. Therefore, it can be important to determine which persons and groups have been allowed the right to talk. Rousseau is a good example of a person who others tried to silence. Many influential people turned their backs on him because of his willingness to voice uncomfortable issues. In the contemporary environmental debate, it is also obvious that not all voices are equal. This becomes incredibly relevant on a global scale. The last report about the implementation of the *Millennium Development Goals* shows in plain language and statistics that the losers in the global economic game still are the poorest people and this continuing problem brings forward the topic of spaces.

Spaces, places, and emplacements

Spaces are important in all social life and are always relevant in connection to power (Foucault, 1989). Foucault (1998a, p. 175) saw his time as an age of spaces:⁹¹ “We are in an era of the simultaneous, of juxtaposition, of the near and the far, of the side-by-side, of the scattered.” Giving space a central position is, according to Foucault, a way of handling time and history. He also claims that, since Galileo and the 17th century, all “localization” has been succeeded by “extension” that lately has given way to “emplacement.” “Emplacement is defined by the relations of proximity between points or elements. In formal terms these can be described as series, trees, lattices” (Foucault, 1998a, pp. 176). “We are in an age when space is presented to us in the form of relations of emplacement” (ibid., 177), and in these networks of space we take many oppositions for granted; for example, between private and public space, work and leisure space, cultural and useful spaces—not to mention central and peripheral political spaces. Even though most people nowadays know that the world is round, particular parts are still more culturally and politically powerful. I will soon address this problem from a historical perspective but, first, I will present Foucault’s conception of emplacements, since it is not only physical and authentic places that occupy our world.

Foucault (1967, 1998a) groups as emplacements, firstly, *utopias*⁹² that are unreal places, either ideal perfected societies or their reversal; that is, real places as turned around. Secondly, he mentions realized utopias that are incorporated into social institutions. He calls these places *heterotopias* and regards them as the opposite of utopias. Between utopias and heterotopias are mixed experiences, as some kinds of mirrors that can be both real and utopian. Open and closing times generally restrict the entrance to heterotopias, and access may also require rituals and the meaning of heterotopias can change over time, mutate, and begin to operate in a new way. There are heterotopias juxtaposing several emplacements that are not usually compatible and that bring to a site one or several other places; for example, theatres, operas, museums, gardens. Asian gardens, for example, represent an ideal world of nature in miniature (Foucault, 1967, 1989a). But, one also has to consider that spaces for Foucault can also denote normative entities, like social orders, hierarchies and

⁹¹ The original version of the article cited here is from 1967.

⁹² The word utopia comes from the Greek words *ou* (not) and *topos* (place) (Ioanne, 2001).

characteristics (see Nilsson, 2008). Even the human body could be classified as a space for health or disease (Foucault, 1994).

As I will show in this chapter, both utopias and heterotopias were common in modern Europe. Stories about utopias flourished and influenced philosophical writing, especially Rousseau's. Many heterotopias, such as museums, libraries, teahouses, theatres and gardens, had gained popular recognitions. Colonial life, in particular the Jesuit colonies in Paraguay, was a rigorously planned activity, a way of shaping an ideal society. Rousseau described the contrast between human-made heterotopias and natural life and preferred the latter.

Rousseau's writings contain images of both utopias and heterotopias. Both were typical in the 18th century and they are still common in our contemporary time, even if somewhat different. Various forms of gardens, museums, and other old types of heterotopias are still usual, but today there are also new forms, such as adventure parks, and imaginary scenes in films and the Internet. In the conception and reconstruction of nature, both utopias and heterotopias are useful metaphors. They mark the limits between reality and dreams, between what is allowed and forbidden, wished-for and undesirable, and between what is appealing at a distance but frightful when approached. In sum, the limit between utopias, heterotopias and real life is gradual, and the diverse forms from real life to its reversals becomes apparent when we consider the diverse types of natural environments as well as diverse forms of human life. With the Foucauldian views of power and spaces in mind, the focus will now turn towards Enlightenment discourses and visions, and to utopias built on a belief in an illumination of humankind that should gradually lead to perfection.

4.2 Towards Enlightenment, with Nature as Guideline

The so-called *Age of Enlightenment*⁹³ or merely the *Enlightenment* was a key stage in the transformation to modernity that had started earlier in Europe. At this time many critical voices saw it as their mission to drag people out from the darkness of the Middle or 'Dark' Ages in order to see the sun, in line with Plato's allegory of the cave (see *Republic*, Book VII). The discourses of the Enlightenment dealt with many fundamentals of the Renaissance worldview, especially central elements concerning

⁹³ See Notes 4 and 5 in Chapter One.

nature. Renaissance questions continued to attract interest, and discourses flourished about the earth, nature, human beings, the Creator, equality, and justice. As early as the end of the 17th century, growing criticism of previous thinking became evident. Criticism extended both outward (geographically), inward (mentally), backward (historically), and forward (visionary). These discourses included arguments for many divergent truths, and involved writers searching for answers to diverse thought-provoking questions, comparing, quarreling, and defending their views. Amidst all the layers of new knowledge and understanding of reality, interest in educational methods arose in order to teach the young generation how to handle all the new phenomena and to further accelerate scientific development. But, according to many recent researchers, the usually acknowledged conflict between the Ancient and the modern, between rationalism and empiricism, is exaggerated, because there was no obvious break between religion and science (e.g., Håkansson, 2005).

It is possible to perceive the Enlightenment as a climactic period that followed a time when all kinds of new truths about the world had come to light. It was an opportunity to initiate and experiment with changes in many areas, although often more was said than done. But it is not possible to summarize Enlightenment thinking in any simple or single formulation since the intentions and the ideas of the time were diverse. The Enlightenment had two opposing faces: on the one hand, it saw a pragmatic acceleration of new ideas and practices, and on the other hand, it questioned the strong faith in progress. This second aspect is also called the Counter-Enlightenment, involving a loud, critical chorus that involved spokespersons from philosophy, arts, and politics. But, such criticism was also twofold: for some it was a fashion and for others a moral conviction. In addition, most of them spoke a language and expressed thoughts that were strongly rooted in the past. In all, it is difficult to separate the Enlightenment from the Counter-Enlightenment, and it is better to talk about the juxtaposition of Enlightenment strains of thought. The British and American word *Enlightenment*, the French *Lumières*,⁹⁴ the German *Aufklärung* and the Italian *Illuminismo* do not designate exactly the same developments, as the process took shape differently in different contexts, and thus no consensus was reached concerning its essence. Instead of the Age of Enlightenment, we could talk about Enlightenment tendencies, involving various conflicting directions and ranging in number from singular to plural (e.g., Muthu, 2003; Outram, 1995; Swenson, 2000).

⁹⁴ Other French concepts for enlightenment are: l'âge de lumière, l'âge philosophique, siècle des lumières, siècle de la bienfaisance and siècle de l'humanité.

Rather than attempting some neat definition of Enlightenment, which would always be open to challenge or qualification, it is more helpful to think of Enlightenment as a series of problems and debates, of ‘flash-points’, characteristic of the eighteenth century, or of ‘pockets’ where projects of intellectual expansion impacted upon and changed the nature of developments in society and government on a world-wide basis. (Outram, 1995, p. 3)

One of the biggest ‘pockets’ was definitively Paris, a place Rousseau repeatedly visited, lived in, and left—always with assorted emotions. Paris was, nonetheless, not the only ‘pocket’. Europe was a dynamic and developing arena with France and Great Britain in the forefront. France, in turn, actually imported many ideas from Scotland and England, and due to the Catholic Church many French dissidents spent their productive years abroad as writers and translators. Rousseau did not appreciate Paris or other big cities; for him they were all similar lodgings for prejudices and he did not even want to call himself a Frenchman. Because he was born in Geneva,⁹⁵ he used to call himself a Genevan,⁹⁶ even though he spent his later life mainly in France and Switzerland. He also lived a while in Italy and was inspired by Italian culture (especially music) and Carlo Culcasi called Rousseau a blend of Genevan, Italian, and Frenchman (in Sprengel, 1917). However, this is not the entire framework; Rousseau also stayed a few years in England and was familiar with English ideas. Most of his life he was on the move, living in several locations, having many associates, maintaining a lively correspondence, and reading various books. This mixture of influences made an impact on Rousseau that was all but clear-cut. In addition, he was inspired by old philosophical texts, especially those of Plato, Aristotle, the Stoics, Plutarch, the Old Testament, and legends, as well as new narratives describing life in non-European regions. Similar fusions of ideas can be detected in regard to numerous other intellectuals of this age.

A central character in the social and individual transformations taking place during the Enlightenment was the European male. The question is: Did Rousseau belong to the ‘inner group’? Rousseau represented the right gender and his social position was somewhere in the middle, between landowners and peasants, and between aristocracy and servants. With the diverse stories he wrote he could connect and influence people belonging to different classes of society. A place in the central

⁹⁵ Rousseau was born in Geneva 1712 and died in Paris 1778.

⁹⁶ In Rousseau’s time the city of Geneva was an independent republic (city state) and, according to Rousseau, an ideal society compared to the depravities of Paris. He called Geneva a latter-day Sparta (e.g., 2nd D), but in *Letters Written from the Mountain* (OC III) he compared Geneva to the corrupt Paris.

‘hub’ of the time was reserved for those who had connections and money, but not necessarily education. Nonetheless, education was not an obstacle and did make spreading one’s ideas easier, of course. Rousseau was poor, lacked formal education, and his personal relations were often unsuccessful, but he was erudite and a talented writer who plunged into all kinds of discourses. To use Scott’s (1992/2006, p. 226) expression, he “faced the dilemmas of modern politics and political science with a clarity seldom rivaled. He was the first important critic of modernity and liberalism within the liberal and modern fold itself.” Many of the debates Rousseau was involved in concerned knowledge and nature and they were in no way completely novel, but his way of tackling them made him both popular and resented.

It is, however, quite impossible to point out a special year as starting point or a special person as the first one facilitating a change, as the rise of new movements are not that simple. It was a fertile time involving a plenitude of thinkers and systems of thoughts. Before and during Rousseau’s time many highbrows developed theories that they called new *systems*⁹⁷ (in lat. *systema*) or new *methods*,⁹⁸ and all were in continuous dialogue that became noisier in its many arguments and counter-arguments. Rousseau was easily inspired and, therefore, I have chosen a few of the influences on his thinking about nature and knowledge that preceded his time and that also influenced issues that he confronted in one way or another. Some of the discourses that he was involved in still continue, since the modern view has uninterruptedly had a bearing on how Westerners have faced environmental and education issues. I will describe my task in unfolding the discourses that involved Rousseau with the help of Foucault, who writes:

Obviously, it is by no means a matter of determining *the* system of thought of a particular epoch, or something like its “worldview.” Rather, it is a matter of identifying the different ensembles that are each bearers of a quite particular type of knowledge; that connect behaviors, rules of conduct, laws, habits, or prescriptions; that thus form configurations both stable and capable of transformation. It is also a matter of defining relations of conflict, proximity, or exchange. Systems of thought are forms in which, during a given period of time, the knowledges [*saviors*] individualize, achieve equilibrium, and enter into communication.⁹⁹ (Foucault, 1997a, p. 9)

⁹⁷ For example, Comenius, Galileo, Newton, and Linnaeus.

⁹⁸ For example, Descartes and Bacon.

⁹⁹ The italics are original.

Nevertheless, in this diverse landscape of thoughts, the concepts “nature” and “natural” appeared variously in many contexts. Ideas discussed during the 17th century concerning God and humans, and their mutual relation as well as their relation to the natural world, survived and developed further in the Enlightenment’s agenda. “Nature” and “natural” were not easily interpreted concepts and discussions of them were strewn with multiple meanings. Such inquiries dealt with human nature, laws of nature, natural rights, and questions such as what or who initiates and sustains life on earth. Rousseau maintained: “Our philosophers never fail to display the word *nature* pompously at the beginning of all their writings. But open the book and you will see the metaphysical jargon they have decorated with this fine name” (RJJ, p. 239, note). However, Rousseau was not innocent in regard to such jargon, as I will show both in this chapter and later. In conclusion, the roots of the Enlightenment are so diffuse, such an extraordinary blend of ideas, that it makes no sense searching for the beginning. The ideas were miscellaneous, and with a critical attitude many 18th century radicals, not the least being Rousseau, scrutinized and knotted these diverse ideas, and left them to drift apart again.

Nature as Curiosity

Curiosity about nature was not elicited for the first time during the 18th century. Instead, the turning point started much earlier and the breakthrough involving the scientific study of nature also occurred centuries earlier. Actually, science was deeply rooted in the past. In the early Christian era, belief in mainly the supernatural order shaped Western thoughts and culture. But beginning with the 15th century, a gradual change of focus took place. In the late Renaissance, Italian humanist scholars restored the classical masterpieces of Ancient Greece and Rome, along with treatises about the natural world (McClellan, 2006; Shapin, 1996).

Nature observations and experiments thus became, more frequent in the 17th century, and this expanding knowledge about the natural world had many consequences. From being an inconceivable and magic creation and a source for nourishment and important services, the natural world became something to manipulate and use for endless human purposes. It became a laboratory, an object of study, a collection of merchandise, and a storehouse of useful items. This change did not come about rapidly, even though the process at its fastest is called “the scientific

revolution.” Scientific change continued apace in the 18th century and began to denote a new way of thinking that remarkably involved the role of nature in human lives and the place of humans in relation to other creatures, the whole world, and the entire universe. Knowledge also experienced a change and a new episteme emerged.

What we now call the biosciences (botany, zoology, ecology, physiology, etc.), geosciences (e.g., geography, geology, geophysics, oceanography), and physical sciences (e.g., physics, chemistry, astronomy) had all been collectively labeled as either ‘natural history’ or ‘natural philosophy’ during the Renaissance, and no clear limit was maintained between a natural world ruled by laws of nature and God’s divine creation. There was, however, a distinction between natural history and natural philosophy. ‘Natural history’ told the biological story about all the evidence embedded in the natural world. It was more than just a story about the past and much more than a description of visible features of particular objects; its role was to sketch a multifaceted story of all the real situations and legends related to the matters in question (plants, animals, etc) (Foucault, 1970). A bird, for example, was not only distinguished from others according to its habitat, nutrition, and habits, but also according to its role in human life. Animals, plants and stars could all carry a heavenly message in form of a symbolic language (Håkansson, 2005). However, when classification entered the stage and naturalists started to employ optical instruments, natural history started to change towards focusing mainly on visible features, as I soon will show. But, still during the Renaissance, one could collect knowledge of ‘natural history’ by examining the external world, while ‘natural philosophy’ was to evolve into the exact sciences, seeking the “true” answers about how nature works by means of experiments in laboratories (Liedman, 1997; Sörlin, 2004). Nature was studied because the natural world was regarded as one of God’s books (*Liber Naturae*), in which the divine truth was written, according to Håkansson, 2005 (see also Harrisson, 2005). The Reformation that resulted in the development of Protestantism gave this message a moral significance (ibid.).

Despite this eagerness for natural philosophy in the 17th century, the search for the truth did not merely focus on nature; numerous philosophic, political, and educational theories also joined the search. Whereas an increasing number of scientific findings challenged the worldview of the Church, the European view of the world was still built on a religious foundation mixed with magic and superstition.

Consequently, scientific¹⁰⁰ thoughts from these days can sometimes sound incoherent and perplexing.

Empirical research accelerated at the end of the Renaissance and increasingly involved many disciplines. These investigations of the natural world went hand in hand with technical innovations, and were increasingly dependent on new optical devices, such as the microscope and the telescope, the barometer and other tools for measurements, instruments for navigation, and machines for reproducing paintings and texts. Instruments became tools of both exploration and expression. Rousseau, however, did not need many instruments; his bare hands and other senses were often enough for him. The search for connections between the macrocosmos and microcosmos made the clock¹⁰¹ an icon of the modern world; it showed the machine-like aspects of nature and even the whole universe in miniature (e.g., Comenius, 1628-1632/1989; Gay, 1966).¹⁰² Just as God was seen as the creator of the world, the clockmaker¹⁰³ was the creator of the clock and, just as all the small parts constituted the mechanical whole of the clockwork, human beings, animals and plants were the ‘parts’ that constituted the world ‘machine’ (Liedman, 1997). From this moment it was possible to calculate time very exactly and divide days and nights into distinct units. Daily life activities in Europe could be organized, synchronized, and divided in both space and time. As everyday life in Europe became dependent on precise timetables, then work, study, and leisure time became distinct and were undertaken at particular times. Power thus took the form of ‘discipline’ that tried to target people’s minds and thoughts and make them live in accordance with a standard way of living; that is, it tried to ‘normalize’ them. Such discipline became easily attainable through the careful organization of an individual’s work, time, and education.

¹⁰⁰ Earlier, the Milesian nature philosophers (e.g., Thales, Anaximander, and Anaximenes) and Aristotle had been engaged with science; however, what we now call “science” is a phenomenon that arose in the 17th century. I will follow Henry (2002, p. 6) and apply the word “science” more or less as a synonym for “natural philosophy” to imply “the endeavor to understand, describe or explain the workings of the physical world.”

¹⁰¹ The inventions of gunpowder, compass and typography that Bacon praised are all Chinese.

¹⁰² The first utensils for measuring of time were non-European, as sundials and water clocks have a very long Asian and Egyptian history. The production of mechanical clocks gained speed in Europe when Christiaan Huygens constructed the pendulum clock in the middle of the 17th century, and Europe could finally equal the Chinese clock that had been created more than 600 years earlier.

¹⁰³ As a curiosity I want to mention that Rousseau was the son of a watchmaker.

Nature as Utility

During the Renaissance the desire arose to control nature with the help of the new scientific knowledge. Recent researchers see Modern nature philosophy as a combination of theology and science. The task was to explore and strive to understand all things, since it was humans' mission to explore nature according to the divine plan (e.g., Harrisson, 2006; Håkansson, 2005; Matthews, 2008). Francis Bacon adapted this purpose and made a devoted effort to strengthen it. In the beginning of the 17th century, he already predicted great human possibilities from utilizing nature according to the pragmatic results of empirical investigations. According to Bacon (1605/1900, 1620/1900), God has given human beings the right to use nature for their own purposes. While humans had lost their control of nature through the Fall,¹⁰⁴ they were also granted a tool for getting it back: knowledge. In *Instaurata Magna*¹⁰⁵ he therefore describes a reformation of science, arts, and human learning in accordance with Biblical wisdom (see also Håkansson, 2005). Using the double-meaning of the word *edifice* (build and enlighten, cf., the German word *Bildung*), Bacon wanted to recover knowledge and rebuild it on a proper foundation.

While Bacon announced that explorations of nature had to follow God's order, the primary goal was to pursue "light-bearing" experiments (those that lead to discovery of causes) over "fruit-bearing" ones because God started with the creation of the light (Bacon, 1620/2004a, p. 17). He also claimed that humans need to master nature again, as had been the case before in paradise, even if this was no easy task; even if nature has to be bent and forced into its new glory. He saw nature as a female, a mistress, to be penetrated and subjugated. But, he also called for charity in the use of knowledge for the benefit of humankind (Bacon, 1620/2004a; Matthews, 2008). In this rape,¹⁰⁶ Bacon thus participated in and inspired the rapid development of modern science in which the expansion of European nationalism and emerging capitalism came to play important roles. Bacon saw no other difference between civilized human beings and the so called 'savages'¹⁰⁷ than technology, but he meant that knowledge

¹⁰⁴ "Fall" means here the Biblical story in Genesis about Adam's and Eve's sin, an incident that caused them to be banished from Paradise.

¹⁰⁵ The word "instauratio" (instauratio) comes from Vulgate (the Latin version of the Bible) and denotes both the re-establishment of Jerusalem at the end of time, and the golden Age when David and Salomo ruled (Håkansson, 2005).

¹⁰⁶ Bacon himself used strong sexual and sexist terms when he talked about how to manage nature.

¹⁰⁷ "Savage" was a vague label (with both a positive and a negative tint) for people living a simple life compared to the European standard. Plato has earlier criticized putting those kinds of general labels on

about how nature works can guide humans to employ the laws of nature and gain control over the unruly resistor. In Bacon's view, such knowledge comes basically through the senses; in comparison, intuition is a primitive relic and not perfectly clear. In his *Advancement of Learning* he distinguishes that the light of nature has two significations: firstly, as it arises from the senses, reason, and arguments according to the laws of nature; secondly, as it arises by internal instinct, according to the laws of the conscience. While the second signification is not reliable, knowledge has to discard individual and shared prejudices as well as supernatural ideas (Bacon, 1605/1900).

Until then, researchers, in the main, had based their investigations on calculations and thought experiments, but Bacon (1605/1900, 1620/1900) emphasized practical research methods. Humans easily make mistakes when they perform research, he argued, but strict empirical methods built on *inductive*¹⁰⁸ approaches can eliminate these difficulties. Through this approach he took his position in the ongoing dispute concerning whether inductive or *deductive*¹⁰⁹ methods (reasoning or experience) are superior. Bacon's ideas are still relevant today, which is why it can be hard to believe that the future scientific society Bacon describes in his utopian book *New Atlantis*¹¹⁰ (1627) was written so long ago. In the quotation below, he envisions advanced biotechnology and describes vivisection¹¹¹ and animal breeding.

We have also parks and enclosures of all sorts of beasts and birds, which we use not only for view or rareness, but likewise for dissections and trials, that thereby we may take light what may be wrought upon the body of man. Wherein we find many strange effects, as continuing life in them, though diverse parts, which you account vital, be perished and taken forth; resuscitating of some that seem dead in appearance, and the like. We try, also, all poisons, and other medicines upon them, as well of chirurgery as physic. By art, likewise we make them greater or taller than their kind is, and, contrariwise, dwarf them, and stay their growth; we make them more fruitful and bearing than their kind is, and, contrariwise, barren

people differing from the own culture thus neglecting such differences; in his case the ancient concept "barbarian" often referred to uncivilized people (Statesman, 262).

¹⁰⁸ *Induction* entails a process where a generalized conclusion about an object or event is based on previous observations of similar objects or events.

¹⁰⁹ In philosophy a *deduction* entails a logical process starting from a claim that has to be proved by reasoning.

¹¹⁰ Bacon's utopian endeavour in *New Atlantis* is of an increasing number of researchers counted as a basic resource for understanding the shift from early modern political thoughts to modern, but also to the emergence of colonialism and nationalism (McKnight, 2006).

¹¹¹ Vivisection means surgery on live animals in scientific research and was performed already at Bacon's time as experiments on living animals (even without anesthetic).

and not generative; also we make them differ in colour, shape, activity—many ways. We find means to make commixtures and copulations of diverse kinds, which have produced many new kinds, and them not barren, as the general opinion is. We make a number of kinds of serpents, worms, flies, fishes of putrefaction, whereof some are advanced (in effect) to be perfect creatures, like beasts or birds, and have sexes, and do propagate. Neither do we this by chance, but we know beforehand of what matter and commixture, what kind of those creatures will arise. (Bacon 1627/2004b, pp. 323-324)

While Bacon's vision was a quest for more knowledge and more highly developed learning, it was logical to connect it to the need for education. This was exactly what the 17th century educational reformer and theologian Moravian¹¹² John Amos Comenius¹¹³ did. While he would agree with Bacon in his eagerness to investigate nature, he had an ambivalent relationship with the scientific developments of his day and lack of enthusiasm for inductive methods. His judgment was that human superiority as a creature lies in education and virtue and, thus, in good manners, religion, and faith (Comenius, 1628-1632/1989). The seeds for these attributes are given to humans by "Nature" (ibid., p. 69), which was the first condition that the humans had to leave because of the Fall and to which they will return, according to Comenius (cf., Bacon above). The reason humans have come to this world is to promote themselves, the Creation, and God, and to enjoy the qualities that come from all these sources (Comenius, 1628-1632/1989). He thus combined realism with religious humanism, and united his remarkable educational ideas in a system called *Pansophia*.¹¹⁴ Comenius had a vision of a complete unity of knowledge, where everything is connected. As with a world of united 'parts', there is unified knowledge and every human being has to strive to attain this knowledge because knowledge of the world brings humans closer to God.

As a keen admirer of the ideas in Bacon's *Novum Organum*¹¹⁵ (Keatinge, 1992), Comenius worked out his educational theories with a desire for scientific processes combined with the belief that truth is to be found in Scripture (ibid.). As with many by the late 16th century, he replaced Aristotle's physics with the Bible (Comenius, 1628-1632/1989). Comenius' educational theory is thus based on a combination of the operation of nature and the Bible and has as its main purpose a heavenly life. To

¹¹² The former Moravia is now a region of Czech Republic.

¹¹³ John Amos Comenius is the Latin name for Jan Komenský.

¹¹⁴ From Greek: *pan* (all) and *sophia* (wisdom).

¹¹⁵ The title *Novum Organum Scientiarum* refers to Aristotle's *Organon* (logical treatises); Bacon thus wrote a new organon.

prepare for paradise humans have to learn to know themselves and things external to them, perform self-control, and focus on God. Humans are images of their Creator, creatures endowed with reason and the right to master nature. In turn, creation is the mirror of the Creator's power and is there to awaken human admiration for the Almighty. Referring to the Bible (Genesis 2:19, Book of Wisdom 7:17 and Sirach 5:18), ¹¹⁶ Comenius (1628-1632/1989) shows that it is the human task to label and understand everything on earth and to wisely utilize it according to the Book of wisdom in Apocrypha:

For in his hands are both we and our words;
All wisdom also, and knowledge of workmanship.
For he hath given me certain knowledge of the things that are,
Namely, to know how the world was made, and the operation of the elements:
The beginning, ending, and midst of the times:
The alterations of the turning of the sun, and the change of seasons:
The circuits of years, and the positions of stars:
The natures of living creatures, and the furies of wild beasts:
The violence of winds¹¹⁷, and the reasonings of men:
The diversities of plants, and the virtues of roots:
And all such things as are either secret or manifest, them I know.
(*The Reader's Bible*, 1951, The Apocrypha, p. 112) ¹¹⁸

The Book of Wisdom is also called *Solomon's Wisdom* and in his utopian posthumous book *New Atlantis* Bacon introduces an order named after the mighty and rich Hebrew king Solomon. The task of this order is to explore the true nature of God's creation. "In the wisdom of Solomon we find the root idea upon which the Judeo-Christian culture of the West was based before the Enlightenment" (Hayman, 2003, p. 769). In this wisdom, religion, science, and philosophy are parts of the same truth. Obviously, both Bacon and Comenius connected the exploration of nature to a command written in the same Apocrypha text. Bacon also talks about Solomon's "natural history," a story about all living things that was not available elsewhere than in a utopian society. This unavailability might be why the Apocrypha (from Greek

¹¹⁶ *Book of Wisdom* is called *The Wisdom of Salomon* in *The Reader's Bible*. According to a Jewish esoteric tradition, King Solomon was not only wise, but he also had a deep understanding of the creation (McKnight, 2006). Both Books of wisdom and Sirach (also called Ecclesiasticus) are included in the Apocrypha.

¹¹⁷ In some Bible versions this word is "winds" and in others "spirit."

¹¹⁸ The quoted text is equivalent with the King James Bible (1997, electronic version). Protestant churches generally exclude the Apocrypha, whereas the Roman Catholic and Orthodox churches include most of the Apocrypha books.

apocryphos that denotes ‘hidden’) has been variously present and variously absent from various versions of the Bible over the centuries.¹¹⁹ Voltaire (1755/1985) found the admiration of the extremely wealthy king Solomon ironic and thought it astonishing that such materialistic texts¹²⁰ as those referred to as Solomon’s at all are included in the Bible.

Like Comenius and other 17th century intellectuals, many people living in the 18th century also had a high regard for Bacon’s strong belief in the power of mind. Bacon made them optimistic about endless progress, with nature being manipulated for the sake of humans (Roberts, 2007). His ideas inspired the creation of scientific societies in Europe¹²¹ (Attfield, 1994). Rousseau, on the other hand, was not interested in studying nature with the aim of utilizing it for human gain. He increasingly opposed such initiatives during his lifetime and in his last book, *Reveries of a Solitary Walker*, he strongly defends the studying nature without economic interests in mind. He greatly enjoyed botanic explorations, but plants had a value in themselves for him, and they were definitely something more than only useful ingredients in medicine. “What[!]”¹²² would I cut, grind up, crush these roses, this reseda, this Euphrasia in a mortar...” (RSW, 252). Rousseau was first and foremost simply fond of nature and enjoyed spending time outdoors. He used botanic gardens for contemplation—to forget himself—not to make him think about his body and its illnesses. When he wrote about the cultivation of plants and animals in *Julie, or the New Heloise*, he described a growing process that only slightly changes the original nature of the organisms. In particular, he often stated that the natural, initial state of things is the best possible and that humans destroy everything they handle. Rousseau criticized all purposeful changing of other creatures, both animals and humans. That is why he was very skeptical of the education of his time, and wanted to take a more noninterventionist approach. I will let Rousseau reply to the quotation from Bacon’s *New Atlantis* above with the first sentences from the opening chapter in his book *Émile*:

¹¹⁹ The Apocryphic texts were included in the King James Bible from 1611.

¹²⁰ Beside the Wisdom of Solomon, he is believed to be the author of the Proverbs, the Song of Solomon, Ecclesiastes, the later Psalms of Solomon and Odes of Solomon.

¹²¹ In 1662 the *Royal Society* was established in England to pursue Bacon’s scientific methods (Attfield, 1994).

¹²² The comment [!] is in the English version (Butterworth, Cook & Marshall, Trans.), but not in OC IV, p. 1252: “Quoi j’yrois couper, broyer, piler...”

EVERYTHING¹²³ is good as it leaves the hands of the Author of things; everything degenerates in the hands of man. He forces one soil to nourish the products of another, one tree to bear the fruit of another. He mixes and confuses the climates, the elements, the seasons. He mutilates his dog, his horse, his slave. He turns everything upside down; he disfigures everything; he loves deformity, monsters. He wants nothing as nature made it, not even man; for him, man must be trained like a school-horse; man must be fashioned in keeping with his fancy like a tree in his garden. (E, p. 37)

And he develops the same line of thinking further in a passage in *Julie* where he praises nature in its most genuineness in contrast to domesticated, urban or civilized forms of nature:

[N]ature seems to want to veil from men's eyes her true attractions, to which they are too insensible, and which they disfigure when they can get their hands on them: she flees much-frequented places; it is on the tops of mountains, deep in the forests, on desert Islands that she deploys her most stirring charms. Those who love her and cannot go so far to find her are reduced to doing her violence, forcing her in a way to come and live with them, and all this cannot be done without a modicum of illusion. (JNH, p. 394)

Rousseau did not reject agriculture or gardening in *Julie*, but his view of how to treat animals and plants was, as these quotations show, completely different than what Bacon envisioned. Bacon's utopian *New Atlantis* and Rousseau's real and beloved St. Peter's Island (*l'Isle de St Pierre*) that he describes in *Reveries* do not have very much in common. Rousseau's favorite undertakings were walking, boating, botanic studies, and other activities that did not disturb his peaceful state of mind, and he did not realize that he had in fact interfered with nature when he settled rabbits from Neuchâtel on the St Peter's Island.¹²⁴ If humans did not show any interest in his love, he offered it to animals. His dog, cat, and canaries were his friends and he nearly their slave; and songs of birds inspired his tunes when he composed music (RJJ). In Rousseau's thinking, nature is a harmonious totality, although diverse biological species are distinct from each other. Even if he puts humans in an order next to God as the most preeminent of all creatures, in the *Savoyard Vicar* (in *Émile*) he sharply claims that it is not the task of humans to blend organisms in any new ways and

¹²³ Capital letters are used both in A. Bloom's English translation and in OC IV, p. 245: "TOU est bien..." When I use capital letters in a quotation after this it is because it is so in the original text.

¹²⁴ Settling new species on an island may cause great damage. If the newcomers lack predators, the population may grow fast and this may hastily reduce and even eliminate particular native species.

fiddle with nature's harmony. Bacon and Rousseau thus represented two opposing views of how much humans should modify the natural world and its elements. The former saw nature more or less as an enemy or rival given to humans by God for them to compete with and utilize; the latter regarded nature as a friend and a dear mother, a proof of God's virtue. Neither of these views was unique for the 17th and 18th centuries and many intermediary views did exist.

Despite not liking experimentations with living things; Rousseau was not unaffected by physical laws and other physical inquiries. Ground-breaking 17th century physical investigations were linked to Nicolaus Copernicus' findings from the beginning of the 16th century, which rejected the geocentric worldview that had the earth as the center of the universe and instead gave the sun the central planetary position.¹²⁵ Newton completed Copernicus' and his other forerunners' research and challenged the scientific methods of his day by applying mathematics to the study of nature. His work *Principia*¹²⁶ had a great influence on scientific development and shaped a new model for investigating the natural world scientifically by reducing empirical phenomena to mechanics ruled by deterministic laws (Molander, 1988). In his physical research Newton combined experimental hypothetical-deductive approaches with mathematics and created methods that could help humans control the natural world (Skirbekk & Gilje, 1993). As with many others of his time, a blend of magic, religion, and science inspired Newton's curiosity. He practiced alchemy (e.g., Ioanne, 2001) and studied Ancient chronology, as well as the prophetic and apocalyptic books of the Bible (Liedman, 1997).

Newton's investigations made it possible to calculate the movements of the planets and showed the usefulness of natural philosophy, replacing the static picture of the world with a dynamic model. His contemporaries interpreted his physics in various ways, and they tried to synthesize his theories with religion. Newton's investigations thus built a stable ground for physics over the next two centuries and influenced many other sciences and philosophy. The language of physics entered

¹²⁵ Copernicus presented his theory in *On the Revolution of Heavenly Bodies* 1543. Copernicus' "heliocentric worldview" was a revolutionary idea initiated much earlier in other parts of the world, but the idea had a lengthy struggle for acceptance in the West. The Greek astronomer Aristarchus of Sámos had already presented similar thoughts in the 3th century BC (Skirbekk & Gilje, 1993). Many followers of Copernicus worked to convince others of the significance of his ideas, among them Tycho Brahe, Johannes Kepler, Galileo Galilei, and Isaac Newton (e.g., Roberts, 2007).

¹²⁶ The complete title of this two-volume work from 1687 is *Philosophiae Naturalis Principia Mathematica* (Mathematical Principles of Natural Philosophy), and it contains his three laws of motion, also called Newton's Laws.

investigations of the mind and even the soul was ‘investigated’ according to physical laws. When Rousseau describes in the *Dialogues* how the first movements of human nature are good but are easily led astray by thousands of obstacles that make human beings forget their original destination, he presents this argument using laws of motion:

Erroneous judgment and the strength of prejudices contribute a great deal to our being thus mislead. But this effect comes mainly from weakness of the soul, which—effortlessly following nature’s impulse—is deflected on colliding with an obstacle, just as a ball takes the angle of reflection, whereas something that pursues its course with more vigor is not deflected, but like a cannonball pushes the obstacle away or is destroyed and falls on contact. (RJJ, p. 9)

Similarly, Rousseau describes his self-examination in *Reveries* using the language of physics, this time comparing his meditations with use of the barometer.

I will perform on myself, to a certain extent, the measurements natural scientists perform on the air in order to know its daily conditions. I will apply the barometer to my soul, and these measurements, carefully executed and repeated over a long period of time, may furnish me results as certain as theirs. (RSW, p. 7)

This kind of ‘physical language’ occurs again and again in Rousseau’s writings, not the least in *Savoyard Vicar* where he explicitly expresses his dislike for metaphysical theories. And mathematics is a relevant political resource in Rousseau’s *The Social Contract*. Many other 17th and 18th century writers adapted such physical language as well, and mathematics was a popular tool in many situations, even in philosophical argumentation (see, e.g., Spinoza’s *Ethics*). The distinction between soul and body was undefined and the same laws operated on both. Humans had become objects of study, and there was much experimentation with different methods for conducting these studies. Consequently, the earlier scientific research methods used for studying nature served as models for the emerging human sciences, where humans are both the subject and the object of knowledge.

Nature and the Human Mind

Bacon’s strong belief in science was shared by Descartes. He argued that it is the task of humans to make themselves the masters and owners of the natural world and

utilize it to the benefit of both contemporary and future generations. Every human being has a duty to be beneficial, according to Descartes (1637/1993a). But while Bacon rejected mathematical and geometrical methods, Descartes was working on a new mathematical model (analytic geometry), exploring laws of motion, and creating a new outline for a cosmology built on Copernicus “heliocentric worldview” (see Descartes 1664/1998b; Iannone, 2001). With mathematics as his prototype, Descartes developed his rational philosophic method in early 17th century France. This method is a combination of a strict deductive technique borrowed from mathematics, and intuitive and skeptical methods for exploring knowledge. Descartes searched for knowledge by means of a cognitive procedure that used doubt to undermine common sense assumptions and to exclude passions and action from the thinking process. By actively trying to question all for granted taken ‘truth’, he made himself ready to receive new ‘uncontaminated’ knowledge (Descartes, 1637/1993a). This process he compares to pulling down a house and building a new one using some of the old building material anew to combine with new knowledge and construct a new house. He began his investigation from a decision to search clear knowledge from within himself without influences from other sources than his own intellect, and he thus decided to doubt all that he formerly knew (ibid.). His doubt was thus an act of his will, rejecting all kinds of external influences and effects of the senses.

From this experience, he summarizes the source of the surest knowledge with the famous sentence: *Cogito, ergo sum* (I think, therefore, I am) (Descartes, 1637/1993a). He draws the conclusion that by eliminating the notion of his own body and feelings, he can clearly see the truth that he exists as a thinking being. Descartes sought an incontrovertible foundation for a new system of knowledge built on pure reason. Thus, he combined natural philosophy and Catholicism and developed an epistemology where his own reason led him to the truth. His idea that human mind can be improved by reliance on its own rational devices had a great influence on Enlightenment thinking (Losonsky, 2001). From then on a person could attain the truth through the objective knowledge reached by reason; truth was not dependent on any self-transforming practice, since the human mind was sufficient in itself (Foucault, 2005). Yet, how did Rousseau respond to Descartes’ method?

In *Confessions* Rousseau describes how as young lad he had read the logic of the Port-Royal group¹²⁷ along with books by John Locke, Nicholas Malebranche,

¹²⁷ The Port-Royal group was named after a place near Paris where an important Cistercian convent was situated from the early 13th century to the early 18th. It was a spiritual center of Jansenism and followed

Gottfried Leibniz, and Descartes. Since he found much contradiction, he methodically tried to follow them one at a time with an open mind and thus work towards conclusions of his own. He said to himself: “Let’s begin by giving myself a storehouse of ideas, true or false, but clear, while waiting for my head to be well enough equipped to be able to compare and choose them” (C, p. 199). Therefore, he read and gathered ideas, and when he was on journeys or lodged in dwellings without books, he started to compare the ideas he had explored and reach his own conclusions. In this process, he applied meditations and reveries, and he mixed rational thinking with intuition. He even claimed that he compared himself with the Orientals. His meditations were not reasonable and sterile, but sweet and illusory (ibid.) or, as he himself described it: “He reasons less...but he enjoys more” (RJJ, p. 121). The objects of his meditations were order, harmony, beauty, and perfection and these reveries took place in the most charming of natural sites.

Being unconvinced by all the doctrines of contemporary philosophers, Rousseau decided to search for his own standpoint by meditating (RSW). The meditations he undertook resulted in the section *Savoyard Vicar* in the book *Émile*. In accordance with Descartes, Rousseau performed his meditations in solitude. Rousseau wanted to tackle all the questions that concerned him. In *Reveries*, he calls his investigations “the most ardent and sincere seeking that has perhaps ever been made by any mortal” (RSW, p. 22), but, honest as he was, he could not deny that he was not completely capable of laying aside all the prejudices of childhood nor his most secret desires. His conviction was nonetheless good, according to him, even if he did not fully succeed as well as he had hoped.

Before Rousseau entered his meditations, he blamed philosophers for eagerly searching for admiration instead of searching for the truth (E). As the root to all disputes he found, firstly, the limitation of the human spirit and, secondly, vanity. Humans are neither capable of understanding their own limitations nor do they know who they are, or how to manage themselves. Therefore, imagination is the only tool available for their self-study; but they nonetheless want to penetrate everything and discover the truth about the whole world. They cannot accept that the human brain may not be clever enough to understand all things, as humans are but a minor part of a larger totality. It is not within the reach of humans to completely understand their

Augustinian theology. Numerous intellectuals who were sympathetic to the movement made religious retreats to Port Royal where they lived in strict piety while pursuing teaching and writing (see, e.g., Bowen, 1981; Catholic Encyclopedia, 2010; Eby, 1952;). Many of Rousseau’s educational ideas bear a resemblance to the Port-Royal teaching methods.

relation to the wholeness that is the world. And even if some could discover such truth and tell the others about it, others should not believe these persons because humans in general are not ready to give up their own beliefs (cf., again, Plato's "Allegory of the Cave"). They hold their own reputations as more important than seeking the truth about the world and the criteria of decent living that can apply to all humankind, Rousseau claimed.

So instead of listening to all the supposedly enlightened persons, Rousseau (alias "the vicar")¹²⁸ starts to search for the light of learning inside of himself. As inspired by Descartes' meditations, the search begins with doubt but soon finds its own route. To begin with, Rousseau reviews all his previous opinions, examines if there is something worthwhile holding on to, and distils this 'essence' from all non-necessities (E). Then he keeps all the knowledge that he instinctively feels pleases him and rejects all other knowledge. He ends up asking: "But who am I? What right have I to judge things, and what determines my judgments?"¹²⁹ The answer is "I exist, and I have senses by which I am affected."¹³⁰ (ibid., p. 270) This amazing answer is not the same as Descartes' "I think, therefore I am." After that Rousseau wants to determine if he has a pure knowledge of his existence or if he gets it through his senses. His conclusion is that his inner sensations and the outer causes and objects of these sensations are distinct. Furthermore, since he exists, other entities also exist. Consequently, he discovers that there are substances outside his body acting upon his senses and they act upon his senses independently of whether they are real or if they are only ideas. He calls these external substances "matter" and their parts "bodies." From this he further draws the conclusion that there is no distinction between the body's appearance and reality; the problem rests in his own biased mind. Therefore, he said that he agrees neither with materialists nor the idealists (E). Descartes separated his thoughts from external influence, whereas Rousseau concluded that this is impossible. With this argument Rousseau participated in modern discourse, along with others such as Locke and George Berkeley, about whether concrete things have an existence independently of whether they are perceived or not (realism), or whether the mind plays a primary role in the constitution of the world (idealism), or if only material things can exist (materialism). A materialist view totally opposes the most

128 I will tell more about the relation between Rousseau and the vicar in the next chapter.

129 Mais qui suis-je ? Ouel droit ai-je de juger les choses, et qu'est-ce qui détermine mes jugemens ? (Pléiade, IV, p. 570)

130 J'existe et j'ai des sens par lesquels je suis affecté (ibid).

extreme idealist view that all things are mental and the world merely a mind construction.¹³¹ Unlike Descartes, Rousseau did not want to suppress the passions because he saw them as “the principal instrument of our preservation” (E, p. 212). To suppress them is “to control nature” (ibid.) and to reject what God has written in his heart and that his conscience, therefore, tells him is right.¹³²

Rousseau is finally convinced about both the existence of the universe and of his own mind. He finds out that he has an active understanding of the word “is” and he states: “Therefore, I am not simply a sensitive and passive being but an active and intelligent being; and whatever philosophy may say about it, I shall dare to pretend to the honor of thinking...” (E, p. 272). In addition, he can compare, judge and arrange things, but the truth is outside him in the material world. The less of his own he puts in the judgments of the material world, the closer he comes the truth—which is situated in material nature not in his own reason. When he employs the power of his own mind, he brings his sensations together and compares them by attention, meditation, and reflection. Matter gives impressions to his senses, and his mind then compares and arranges them (E).

There are definite resemblances between Rousseau’s and Descartes’ investigations and conclusions. Both used themselves and their own minds as objects of study. Rousseau announced that he wanted to find a rule of conduct for the rest of his life and not, like “certain modern philosophers,” study human nature in order only to talk knowledgeably about it. Nevertheless, Rousseau, as well as Descartes, narrates his meditations in an instructional tone and draws general conclusions. In the *Savoyard Vicar*, Rousseau even says that his system clarifies his meditations (see RSW). However, the outcomes of Descartes’ meditations and Rousseau’s are clearly at odds. Rousseau does not rely on any independently functioning human intellect, but points out the inescapable mutual operation between intellect and sensual perception involving other creatures, living and inanimate things, and he addresses the resulting problematic that humans always thus deceive themselves. This is a fact that Descartes points out, even if he believed it was possible to actively overcome. Descartes’ meditations are repeatedly cited, while Rousseau’s are rarely referred to.

¹³¹ There are many views of materialism, realism and idealism, but I can not engage that discussion here.

¹³² Rousseau’s version of the Cartesian meditations seem to have been influenced by Condillac’s sensualism. Étienne Bonnot de Condillac, who interpreted Locke’s empiricism in France, was an acquaintance of Rousseau’s who was familiar with his writings (C; Cranston, 1983).

On the other side, there is a resemblance between Kant's famous *Critique of Pure Reason*¹³³ and Rousseau's claims.

The Position of Humans in Nature

However, Rousseau saw the human mind as superior to the human body and, like Descartes, he often defended in his writing the opinion that humans consist of a mortal body and a divine soul. In the *Reveries* (p. 33) he states: "My body is no longer anything to me but an encumbrance, an obstacle, and I disengage myself from it beforehand as much as I can." Yet, Rousseau's above meditation shows that he did not strictly separate body and soul. Below I will analyze Rousseau's and Descartes' views in relation to several other, more or less overlapping, ideas. Once Descartes said he learns from nature that he is not only in his body like a sailor in his ship, but that his self is blended with his body into a unity. Another time he was convinced that the body and the soul are distinct and thus held a clear dualistic view of both humans and the world. In that situation he divided the world, firstly, into material substance, *res extensa*, situated in the word; and secondly, the thinking mind, *res cogitans*, as situated in the human soul (Descartes 1640/1998a, 1666/1998c). Because of this division, people have often blamed him for having initiated a division between the human mind and body. But a thorough reading agrees with present day Descartes researchers (e.g., M. D. Wilson, 1999; Skirry, 2005) who do not hold him entirely guilty for this outlook. It may be a slight exaggeration to accuse Descartes alone for the centuries-long dualistic split between body and soul, because on this point he was not definite. Skirry (2005) points out Descartes' claim that sensations require a body for their existence. This is true, because sensations are bodily functions; but Descartes (1649/1993b) does not mean, on the other hand, that sensations necessarily need a soul. Instead, he states that the body can do without a soul since he saw animals as merely "mechanical automata" (see Cottingham, 1993). Altogether, Descartes admitted that he could not really understand and explain the connection between mind and body. While positing the distinction between body and soul, he

¹³³ It is impossible to reject the similarity between Kant's distinction between "Ding für mich" (the thing for me) and "Ding an sich" (the thing for itself) and Rousseau's view of the human incapability to objective perception. Kant (1781/2004) maintained that a thing in itself is unknowable because humans are not capable of knowing a thing in an absolute sense, regardless of the a priori conditions of knowledge; their knowledge and perception must conform with transcendental conditions that apply to all intuition and thinking.

also talked in a letter about their union as a third essential category (see Cottingham, 1993).

Descartes' ideas are not especially odd; a view of the human body and soul as separated had been present in the Western history in diverse forms long before him. During the Renaissance, many thinkers put humans in a position between God and animals—between the animal evilness and divine goodness, but also between the brute and civilized. The situation of humans was thus paradoxical: they were half beasts and half angels (Suutala, 1996; Piltz, 1991). The soul was looked upon as rational and good, whereas the body was emotional and evil. There was a shifting limit between animals and humans and, according to Erasmus of Rotterdam; humans thus have to be educated to become human and to subdue their animal nature (Suutala, 1996). Through instruction, humans can become good, rational, and humane. Many educational theorists after Erasmus have repeated and varied this declaration (see also Chapter Two).

Descartes compared the human body with a machine, where the body is a fusion of many mechanical components and the soul comprises thoughts and passions (Descartes 1666/1998c). However, every soul can learn to master its passions if it receives good instruction, according to Descartes (1649/1993b), but a soul connotes a human being. He thought that all animals¹³⁴ have a body but, unlike humans, have no souls, are not capable of reasoning, and thus operate merely mechanically. Reason separates humans from animals (Descartes 1666/1998c). Therefore, another remarkable division Descartes is accused of, beside the body/soul partition, is the difference he stressed between humans and animals. His view of animals as machines differ from the earlier Aristotelian view presented in Chapter Two. A Cartesian view of animals as material bodies that do not feel pain combined with a Baconian vision of the possibilities of vivisections makes research on animals appear rational and even defensible.

But other voices also spoke in the 17th century with other tones than Bacon's and Descartes' pragmatic inputs. The English philosophers Henry More and John Ray both criticized Descartes' mechanical philosophy forgetting nature's powerful vigor (see also Attfield, 1994; Sörlin, 2004). According to More (1659/1987), there is a world spirit, *Anima Mundi*, present in nature. J. Ray (1707/2007) agreed with Bacon that the best way of understanding God's work is through experiments and

¹³⁴ Sometimes Descartes includes humans in the concept of "animals" and sometimes he distinguishes between animals and humans.

observations, and he deemed empirical studies superior to book knowledge. In addition, Ray described humans as the only creatures capable of virtue and vice, but he did definitely not consider the animal body comparable to a machine or to clockwork. The movements of living things in nature, including the human body, are vital and not mechanical, regulated by final causes and elementary principles, according to J. Ray (*ibid.*).

Rousseau's nature theology, exposed in *Savoyard Vicar*, shows resemblance with Ray's, but even Rousseau called both plants (RSW) and animals (including humans) "machines." However, this does not correlate with his view of humans as possessing free will. In the 2nd *Discourse* Rousseau depicts the natural state of a human being as that of an animal—a state that in some aspects is superior to other animals and in other aspects inferior but that has advanced qualities that other animals lack. There is, however, no doubt that he wished humans should treat animals decently (RJJ; C). Every animal has senses, according to Rousseau, and even they have ideas that they can combine to a certain degree. In his opinion, the difference between two humans can be bigger than between certain humans and beasts, since humans differ from other animals only in degrees, and the difference is not in understanding but in the possession of free will and the capability for judging, choosing, and resisting. Humans explicitly diverge from animals since they are free agents (DPE). Another distinguishing feature Rousseau pointed out is the human inborn faculty for self-improvement (perfectibility). "[A] brute is, at the end of a few months, all he will ever be during his whole life, and his species, at the end of a thousand years, exactly what it was the first year of that thousand" (*ibid.*, p. 88). But, if a human being falls back to a primitive state where she acts only out of instincts (because of aging or an accident), she will stand lower than the brutes (DPE).

In contrast to the dualistic thinkers, Anne Conway (1690/2003) claimed that an intimate bond and unity exists between body and soul with no fixed limit between them, only a fluent alteration. She saw the body and the soul as the same substance since the soul is hurt when the body is wounded, although the soul can be more superior in certain aspects—for example, in swiftness, penetrability, and soulfulness. Conway angrily rejected Descartes for seeing nature as machinery, and she stated that nature is not an insensible clockwork, but a living, sensitive body that is much more sublime than a mere unthinking mechanism. Spinoza (1670/1891) also rejected Descartes' view of body and soul as separate substances and claimed, instead, that both bodies and souls are attributes of the same substance and that humans know

about their own existence through the sensations of their body. Spinoza had a vision of one only infinite substance including everything on earth, so that nothing exists external to this substance. This view of a divine substance that includes the entire universe, called *pantheism*,¹³⁵ shares similarities with certain views of Deism that I will describe later in this chapter (see also Chapter Two). Gottfried Wilhelm Leibniz presented a totally different picture of the world, not only split in two parts, but in a countless number of entities or centers of force that he called *monads*. Each monad represents a microcosm and is thus only a part of a great divine plan. Leibniz and Spinoza thus had completely opposite theories of reality; Leibniz emphasized a *pluralistic* theory of reality as consisting of many substances, and Spinoza a *monistic* theory with only one substance but with ‘dualism’, in turn, dividing reality into two parts. All these systems can include God, either as an external force or as among the worldly substances. In the next chapter, I will show how Rousseau further developed his ideas about goodness and divinity, but first I will explain the various concepts of divine or natural jurisprudence.

Natural Morals and Rights

Many factors accelerated the search for new European constitutions, such as political reorganization caused by many wars in both the colonies and the home continent and new ideas initiated by the Protestant Reformation and Renaissance ‘humanism’. As a result, legislation, questions of morals, and rights became urgent topics. As the Europeans learned to know more about the world, curiosity arose about differences and similarities among its inhabitants and about the origins of humankind (Geras, 1999). Issues such as human nature, natural rights, and justice were raised and became frequent on the intellectual agenda of the time. A dominant political Enlightenment topic with Stoic influence was the ideas of *natural laws* (*jus naturale*). But, as Rousseau accurately stated, diverse interpretations of the concepts *natural law* and *natural right* flourished (2nd D), and the two terms were not clearly distinct. Consequently, the concepts “natural right(s),” “natural law(s)” and “natural justice” could have the same meaning but could also differ or overlap. I will not try to embark upon this incongruity here. My intention is instead to give examples of differing ways

¹³⁵ Pantheism from Greek *pan* (all) and *theos* (God).

of entering the discourse as background to Rousseau's view and I will then employ the same concepts as were used by the authors in question.

All through the Renaissance, a variety of voices had spoken in favor of a united world order, a reawakening of the Ancient dream of cosmopolitanism. From the very beginning the idea was incorporated in Christianity, and the Papacy had repeatedly instantiated its tenets in becoming the spiritual leader of the world. Non-ecclesiastical humanists¹³⁶ had also talked about cosmopolitanism, especially Hugo Grotius,¹³⁷ who was upset by the religious wars and constructed a theory of general international laws to bring order into the chaos of the world (see Murphy, 1985). He sought to find principles of natural law (*jus naturale*) based on both human and divine authority. Because natural law is a theory of a standard justice based on universal reason that applies to all individuals, its principles promised common rights and justice for all peoples of the world (e.g., Iannone, 2001). In its Christian modification, the Stoic account of natural laws became God's laws and denoted that, following God's initiation, all individuals should love their neighbors. Humans are God's creatures, and since God had equipped them with reason in contrast to other animals, they have to follow the laws of nature; that is, God's laws (Plamenatz, 1969). These laws are even obligatory in a state of nature that lacks rulers or political systems supervising human conduct. Everyone has obligations towards fellow members of their species simply because they are humans. The tool for discovering these rules and acting righteously is *reason* (ibid.). However, when discussing the philosophy of Spinoza, Næss (2002) points out that what we call "reason" today is not a good translation of the 17th century philosophers' interpretation of the word *ratio*, since they used the word to denote choosing in harmony with human nature or conscience, and Spinoza used *ratio* to explain an "inner voice" communicating through emotions.

Thus, *ratio* primarily referred to a combination of feelings and reason in the human interrelation with the world and increasingly became a logical weapon for fighting human passions. According to the English philosopher Thomas Hobbes (1651/1998), humans were driven by selfish passions in the state of nature, but it is well known that Rousseau did not share Hobbes' opinion on this point. Hobbes' ideas of natural laws and about the formation of societies differ from Rousseau's thoughts, but Hobbes definitely inspired Rousseau to investigate these issues and influenced

¹³⁶ Other voices that endorsed cosmopolitanism were for example Dante Alighieri, Gian Battista Vico, and Christian Wolff (see, e.g., Conversi, 2000; Murphy, 1985).

¹³⁷ Hugo Grotius (Huig de Groot) constructed his theory in 1625.

Rousseau, even if Rousseau often argued against Hobbes. A basic problem Rousseau raises is that many philosophers started at the wrong end when they tried to define natural rights (2nd D). He thought it was impossible to set forth rules for humans' common interest in a social state that is far from natural. According to Rousseau, humans living an 'unnatural life' and disagreeing about what is a law cannot stipulate natural rights: "Knowing so little of nature, and agreeing so ill about the meaning of the word law, it would be difficult for us to fix on a good definition of natural law" (DPE, p. 80).

According to Hobbes (1651/1998), humans are born aggressive, always striving to be the best. In a natural state, he notices particular inborn features that create disputes among the human species members; *hate, lust, ambitions, and covetousness*. Hobbes supposed that humans in a state of nature, without a common leader and isolated from society would live in a state of continuous war, neglecting all other pursuits, steadily afraid for their own lives. In such a situation of no laws and no rights, no person possesses anything. Humans thus strive for peace, on the one hand, because of their fear of death and, on the other hand, following their desire for a comfortable life. Human reason makes them unite and shape common natural laws. Of these laws, Hobbes (ibid., p. 86) firstly defines *the right of nature (jus naturale)* as the freedom of people to use their own powers to preserve their life and do what is best according to their own reason and judgment. Such liberty is thus the absence of external impediments. Secondly, he defines a *law of nature*¹³⁸ (*Lex naturalis*) as a general rule and product of reason that forbids humans from acting destructively towards themselves or neglecting the proper means of preserving their lives (ibid.).

In Hobbes' vocabulary the word "right" means the freedom to act or not, while a *law* obliges humans to act in a particular way. The profound *right of nature*, then, is the freedom to protect oneself with all available means, whereas the profound *law of nature* obliges one to strive for peace. But, when everybody has the right to everything, it is necessary to limit individual claims, otherwise there would be endless war and nobody would ever feel safe. The second law is the law of the Gospel; "whatsoever you require that others should do to you, that do ye to them". (Hobbes, 1651/1998, p. 87) In reversed form, this means that you shall not do to others what you do not want them to do to you. The problem with violent behavior disappears when individuals willingly transfer their individual rights to another or a

¹³⁸ The concept *law of nature* is not to be mixed with the universal scientific principles called *nature laws* (for example Newton's law of motion).

group of others in order to attain self-protection. This mutual transferring of the right is what Hobbes calls the “social contract” and requires a third law of nature, “justice”, or “that men perform their covenants made” (ibid., p. 95). When many humans join and transfer their powers in a social contract with a common strong ruler they form a state. Hobbes operated with several other laws than these three. Space prevents presenting them all here, so I now move forward and deal with Rousseau’s and others’ perspectives of natural law and natural rights.

Rousseau rejected Hobbes’ idea about pre-civilized humans as being in a condition of violence, because they had no idea of evilness in such a state of nature. After reading the writings of *Jean-Jacques*’ writings one of the characters in the *Dialogues*, the *Frenchman*, states as the “great principle” of *Jean-Jacques* that “nature made man happy and good, but the society depraves him and makes him miserable” (RJJ, p. 213). In Note IX in the 2nd *Discourse* Rousseau also makes this clear:

Men are wicked; a sad and constant experience makes proof unnecessary; yet man is naturally good;¹³⁹ I believe I have proved it; what, then, can have depraved him to this point, if not the changes that occurred in his constitution, the progress he has made, and the knowledge he has acquired? (2nd D, p. 197)

But what did Rousseau really mean about man’s natural goodness? Broome (1963) interprets Rousseau’s ‘natural good’ as a “passive innocence,” since humans are not apt to moral reasoning in the natural state. However, it is notable that Hobbes and Rousseau did not agree on what the state of nature entails. And Rousseau neither agreed with Hobbes’ strong belief in reason nor did he hold reason as a primary human attribute. I will examine this disparity more thoroughly in the next chapter where I present Rousseau’s view and I will, therefore, only give a brief foretaste of Rousseau’s philosophical anthropology here.

Rousseau’s search for what is prior to reason and thus is true human nature rejected all scientific scholarship. Instead, he intuitively commented on what he saw as the most profound human norms. In particular, he found two principles that he thought must be prior to reason: firstly, that humans are very interested in their own wellbeing and preservation; and secondly, that human beings dislike seeing members of their own species suffer. Self-preservation and compassion (pity, *la Pitié*) are,

¹³⁹ “Les homes sont méchants; une triste et continuelle experience dispense de la preuve; cependant homme est naturellement bon” (OC III, p. 202).

therefore, human attributes prior to reflection. Thus all the rules of natural law rely on these two initial principles while reason develops later. Instead of the law of the Gospel, Rousseau draws attention to a more useful maxim of goodness: “Do your good with the least possible harm to others” (2nd D, p. 154). Compassion fosters this maxim of natural feelings, not sublime aims, he said. Awareness of the other’s sensibility, not the other’s intelligence, should guide actions towards others. Rousseau claimed that it would not be possible to include animals in natural laws on the grounds of intelligence or freedom (2nd D). They cannot ‘know’ natural law, as they possess neither knowledge nor freedom. Instead, Rousseau regarded animals as sensible and thus he concluded they did have natural rights that entail that humans are obliged not to make the animals suffer.

In Hobbes (1651/1998) definition ‘the laws of nature’ are obligations for individuals to behave decently towards others in pursuit of advantages for themselves, while ‘the state of nature’ in Locke’s (1690/1997) version is not a war, but has from beginning a ‘law of nature’ governing and obliging everyone by reason. It is reason that prevents individuals from acting destructively against others. In Locke’s mind ‘the law of nature’ requires not harming anybody else—not their health, life, liberty or possession—unless justice is owed to an offender of that same law. Locke meant that human beings are born free and equal with a right according to nature to decide about their own property (their lives, liberties and lands). God gave the earth to humankind in common, according to Locke, but everybody received an unlimited right to use the land as long as they did not occupy their neighbor’s share. Since God made nothing to be spoiled, he has given humans intelligence and creativity for utilizing the earth. By use of one’s own labor on a piece of nature an individual could receive the right to a portion of that land. “It is labor, then, which puts the greatest part of the value upon land, without which it would scarcely be worth anything...” (Locke, 1690/1997, p. 26). The resources nature produces are worthless in themselves, but the whole chain of labor needed to develop them gives them value; actually 99 % of the total value, according to Locke. While humans have put a value on gold and silver, they have found out ways of possessing more land than anyone needs and when they have joined in societies the role of the society has been to facilitate managing its members’ properties, private ownership in particular (ibid.).

Contrary to Hobbes, who paid attention to self protection, Claude Adrien Helvétius saw human self-interest as the force of progress. Humans search for

pleasure and try to avoid displeasure, and all their efforts strive towards maximizing pleasure. When everybody searches for ‘the good’ it is question of desire, and the result will be good for all. To know if an action is right or wrong, one needs to compare the consequences, according to Helvétius. Thus, he asked if a given action brings pleasure or displeasure for the actors. Helvétius ideas were further developed by Bentham into the doctrine of *utilitarianism* (see Chapter Two) and have influenced liberal politics. An Englishman who lived and expressed his thoughts at the same time as Rousseau and Helvétius, and who is more similar to the latter, is Adam Smith. He regarded human self-interest and happiness as the driving forces of rational actions and of economic life (e.g., Skirbekk & Gilje, 1993). Social life is then like a market where individuals exchange products. Rousseau, in contrast, attacked all kinds of egoistic thinking that emphasized self-interest in form of pleasure. Equality and freedom, not pleasure, were Rousseau’s main concerns, and his worry was how to forge a union where all individuals would protect each other and yet remain free. This happens, he said in the *social contract*, when duties succeed desires and humans act rationally in accordance with common criteria. In a society, humans have to give up their original freedom, but they receive other advantages instead—as long as they do not abuse the situation. From being mostly like a stupid animal with natural compassion, human beings became rational when they left the state of nature, Rousseau argued. For him freedom was to follow the law one has set for oneself; then individuals become their own masters instead of being slaves to their desires. Rousseau distinguished two kinds of freedom: on the one hand, natural freedom that depends on individual power and, on the other hand, the freedom as a citizen that is dependent on the common will. In opposition to Locke, Rousseau argued that individuals only have the right to possess the commodities they need for survival; but, like Locke, he suggested labor and cultivation as criteria of ownership. However, Rousseau did not emphasize accumulating wealth but, instead, thought that wealth is enslaving and makes humans unhappy.

In conclusion, philosophical discourses of the 17th century included diverse theories regarding, firstly, how social life had developed; secondly, what the bases were for common rules; and, thirdly, how a well-functioning society should be organized. The Enlightenment brought with it a belief in an enormous developmental capacity of both humans and society. A search for universal laws and ethical foundations took place alongside a stipulation of human uniqueness and claims for individual autonomy. The ideas recounted above are only a few examples of how

differently various political thinkers understood the many issues relating to the human community. One saw humans as naturally solitary, another as social; one as evil, another as good; one as searching for pleasure, another as rational. And the foundational laws of human societies could be grounded on God's will, 'natural preconditions,' or common agreements. The shaping of such social laws also was connected to the laws of nature and to science.

4.3 Reshaping the World

Science and scientific thinking have always broadly influenced people's life and thinking, and whether science is intertwined with religion or not, it is extensively related to politics, both national and between governments. Furthermore, science is dependent on financing and often undertaken with the hope of profit. This was also the case in pre-modern Europe, whose scientific history is linked to economic growth, worldwide commerce, and the birth of strong nation states. And scientific curiosity was not unique to Europe. Chapter Two already noted that other areas of the world have given evidence of remarkable scientific capacity and the history of European scientific development is not only a story about events taken place there; it is deeply connected to the exploration and colonization of non-European regions. European modernity was in fact created by interaction between the West and non-West. More and more voices have started to realize that, initially, Europe actually was peripheral to the world economy which, at least until the middle of the 18th century, was Asian-centered (see Mitchell, 2000). Sometimes the colonies served as models that promoted change in Europe. For example, Caribbean sugar production based on slave trade may have promoted modern bureaucracy and administration of labor in Europe, but the whole business was of course rooted in the colonialist's interest and in European strategies (ibid.).

A Divine Order

The pre-scientific past had a remarkable influence on the 18th century thinkers and many conflicting ideas flourished side by side (Gutek, 2001). In part, this might have made it difficult for curious persons like Rousseau to find stable grounds for their thoughts, and this might explain why his arguments often seem inconsistent to us

today. Outram¹⁴⁰ (1995) notes that, despite reformations and new movements, the Enlightenment saw neither any decline in religious beliefs, nor any radical shifts in its meaning and context. The Catholic Church was in a strong position and did its best to manage the growing field of science. Scientific discussions, in turn, had an impact on the Church, so the impact could be called mutual. Regardless of tendencies towards atheism and dissention, many scholars and writers were careful not to be openly antireligious in their books. Galileo was a warning of what can happen. In 1633, the Roman Catholic Church forced him to publicly denounce Copernicanism and sentence him to spend the rest of his life under house arrest (see, e.g., Deeley, 2001). He was not the last of his kind in this respect: philosophes Voltaire and Denis Diderot both spent some time imprisoned and Rousseau had to live in exile because of more radical religious statements than the Church could countenance. Even though, Rousseau's relation to religion was vague, and even if he mixed various religious ingredients, he was conceivably a religious person, and did not argue for atheism. Actually, Morley (1891) calls Voltaire, Diderot, and Rousseau true reformers of the Catholic Church because their radical writings called into question the most hallowed features of Catholicism, particularly the belief in miracles. Diderot attacked the Catholic Church for resting on authority and tradition and leaning on a philosophy where man is the final cause of the universe (ibid.). Voltaire always spoke very ironically of Christian traditions, religious dogmas, credulous reading of the Bible, discrepancy between acts and sermons, and so on. The natural religion Rousseau defended aimed to evade fanaticism, skepticism, atheism, and egoism (see E).

Some Enlightenment thinkers, especially in France and Great Britain, were *Deists*: a rationalist religious philosophy that was influenced by scientific thoughts and that rejected many well-established elements of Christianity. Rousseau expressed his variant of Deism in a section of about 70 pages of the fourth chapter of his book *Émile*, the already mentioned *Savoyard Vicar*.¹⁴¹ The Deistic view of God connects with Aristotle's concept of a 'sufficient cause' as a creator force or *Prime Mover* of the universe, but also to the Stoic philosophy and even to the mechanical thoughts of Descartes and Newton (Edelman, 2004). Standing on such a miscellaneous foundation, Deism was not a religion as such, but could take various shapes. Some

¹⁴⁰ In this claim Outram refers to Gay, Vovelle, Thomas, Hegel, Adorno, and Horkheimer,

¹⁴¹ *Revelation* (or Revelations) is a Book of the Bible including a describing of the end of the world.

Deists¹⁴² believed in God's moral command and others did not. Another controversial subject was the soul's immortality, whereas there was a more agreed denial of Revelation. Some Deists stood closer to Christianity, others closer to atheism (ibid.). The Stoic influence pleaded for a life in accordance with nature, commitment to universal truths and natural laws, and a view of the wellbeing of humankind as more significant than that of individuals. This Deistic view was, on the one hand, the basis of a natural religion where God and nature became indistinguishable. On the other hand, a more mechanical fraction saw God as an engineer in the machinery of nature. The usual Deist comparison was of God as the eternal watchmaker who set the universe in motion ticking, but thereafter did not intervene, thus leaving humans free to use reason to their betterment. Despite the diverse versions of Deism, its Christian roots were nonetheless obvious. However, the purpose was pragmatic; the Deists rejected religious dogmatism and intolerance, and advocated equality and religious freedom (ibid.). In the Deistic message, a quest for morality stood above sacred words, and nature was brought into the center of attention. "Nature became a map for salvation as well as political and religious propaganda. It was the garden of God where the king strolled" (Barrera-Osorio, 2006, p. 112). Similar to the close relation between religious beliefs and natural laws were tendencies towards joining the laws of nature with social conditions. Like Rousseau, the Swedish naturalist Carolus Linnaeus (1760/1978b) saw nature as a harmonious system created by God, and the order in nature could serve as a model for human societies. The physician and economist François Quesnay¹⁴³ argued that nature provides humans with the best instructions of how to understand welfare and happiness¹⁴⁴ (Eriksson & Frängsmyr, 2004). Rousseau spoke about the "body politic" and compared society and its parts to the animal body and its organs:

¹⁴² Immediately after the publication of *Émile* and *Social Contract* in 1762 the French Parliament decided to burn the books and imprison the author. Both the state and the Church banned the books (see C; Broome, 1963; Dent, 1992). The main reason for this repulsive reaction was the controversial way Rousseau dealt with Christianity and the Catholic Church in *Émile*. After this misfortune, Rousseau had to leave France immediately and was not even welcome in his native Geneva.

¹⁴³ Quesnay (1694-1774), who was the leader of the *physiocrats*, wrote articles about economics for the *Encyclopedia* (see later in this chapter). According to the *physiocrats* all wealth, originates in agriculture, and its value increases if nature is productive. The *physiocrats* emphasized free trade and a tax policy levying direct taxes on land ownership (see, e.g., Foucault, 1970).

¹⁴⁴ This kind of thinking is reminiscent of the diverse ideas about systems theory flourishing in the 20th and the 21st century—theories in connection with epistemology and sustainable development that Stephen Sterling has brought forward using the ideas of Gregory Bateson and Fritjof Capra, among others (see, e.g., Sterling, 2004).

The sovereign power represents the head; the laws and customs are the brain, the source of the nerves and seat of the understanding, will and senses, of which the Judges and Magistrates are the organs: commerce, industry, and agriculture are the mouth and stomach which prepare the common subsistence; the public income is the blood, which a prudent economy, in performing the functions of the heart, causes to distribute through the whole body nutriment and life: the citizens are the body and the members, which make the machine live, move and work; and no part of the machine can be damaged without the painful impression being at once conveyed to the brain, if the animal is in a state of health. (DPE, pp. 125-126)

For ages, humans have sought to understand the natural world and to find some kind of reliable order and those who are responsible for maintaining it. Foucault (1970) stressed that an epistemological change took place during the classical era that replaced the resemblance concept with classification. I tend to agree with this, but not completely, because this change was not sudden. The search for resemblances went on in parallel with a view of nature as a divided and ordered system waiting to be classified. Even in the 18th century, the *element theory* of Empedocles from the 5th century BC still flourished. Empedocles operated with a theory in which nature consists of four elements: fire, air, water and earth. These were affected by two forces, love and hate (Lübcke, 1988; Skirbekk & Gilje, 1993). In his *Timaeus* (32-33), Plato describes how the creator formed the universe in a proportional relation between the four elements and how he shaped the spherical earth of these same elements.

Linnaeus, who saw nature as a firm system that could be organized in many ways, arranged the earth according to three elements: water, earth, and forest (Linnaeus, 1760/1991b). And he divided the natural world into three, according to him, totally dissimilar categories: the kingdom of stones, the kingdom of plants, and the kingdom of animals (von Linné, 1749/1978b).¹⁴⁵ Humankind was the master of them all—the reason God had created the rest. But, Linnaeus also distinguished a hierarchical order between the other living creatures. In opposition to many others, Linnaeus (1760/1978b) argued that the animals uphold the balance in the botanical kingdom and thus are created for the sake of plants, while the plants make God's wisdom evident. Human beings manage the animal kingdom, but also the plants, while all are created for human sake. Linnaeus thus saw the plants as prior to the animals in contrast to Aristotle, and gave them his fullest attention. Linnaeus' view of plants is

¹⁴⁵ Carl von Linné is the Swedish name for Carolus Linnaeus.

reminiscent of Plato's view in *Timaeus* (77a-c) where the earthly plants are regarded as kin to humans, who are called heavenly plants,¹⁴⁶ and this might have influenced the analogy of education as a kind of gardening (e.g., Comenius called pupils 'plants' and described the teacher's role as the gardeners).¹⁴⁷

Botanical gardens became a fashion in the 18th century; this interest was partly due to the economical and practical benefit of plants, especially their pharmacological importance. Another reason for the widespread interest in plants was aesthetic. Rousseau repeatedly agreed with Linnaeus (1737/1991a) that no luxury or cultural entertainment in life was more enjoyable than the study of plants. For Rousseau, botanical studies were a way of enjoying his being and proving the existence of the Divine (see Chapter Five).

In addition to the belief in a divine order, ideas flourished about a gradual progression where all species develop towards a greater perfection.¹⁴⁸ This steady change should happen through revolutions that take the form of huge nature transformations affecting the climate and other living conditions. The series of revolutions (events) were supposed to be predestinated. It was the Creator who had arranged a series of revolutions affecting the whole solar system, a sequence that should initiate changes not only in the earthly species but set forth a metamorphosis of the whole world from a larva to a butterfly. Nevertheless, according to this theory, while new species are born and others disappear, the innate hierarchy between species remains and likewise the gap between the foremost species, humans, and God (Foucault, 1970, mainly referring to Charles Bonnet).

The idea of perfection is not equivalent with Darwinism, where mutations (spontaneous genetic changes) can give birth to new species; instead the change takes place as a result of a designed chain of events. In the 2nd *Discourse* Rousseau elaborates this same idea of a series of stepwise human development with revolutions changing its course, but it is not a question of an absolutely positive progression; instead, he depicts a process of change that also involves negative effects (more on this follows in Chapter Five). To regulate this process towards a virtuous perfection is a much more complicated proposition and one of the challenges I will deal with in Chapter Six. Rousseau did not calculate perfection to be a feature for animals other than humans.

¹⁴⁶ The connection to the gods and heaven is the reason to human's upright position.

¹⁴⁷ In the Finnish language the word "kasvatus" means both 'cultivation of plants' and 'education'.

¹⁴⁸ Darwin's and others evolutionary ideas had a strong grounding in this idea of perfectibility.

The European Man as the Hub

In the end of the 18th century, cosmopolitan ideas had to fight against growing nationalistic ideas, and Rousseau was an enthusiastic defender of the nation state. Yet, many of the Enlightenment writers emphasized cosmopolitanism, among them Montesquieu, who expressed his disagreement with a worldview that prejudiced people from other parts of the world on behalf of Europeans (Conversi, 2000). Although his cosmopolitan thoughts did not lack support, the idea had no immediate influence. Not even every so-called cosmopolitan advocated a global moral world order; cosmopolitanism could also denote ‘world citizenship’ in contrast to national citizenship.

Linnaeus was not the only one who regarded Europe as extraordinary. His thought reflected a more general opinion of an inconsistent world order, allied with opinions of human development built on myths, investigations, and commercial interests.¹⁴⁹

Anything different from the European norm was often looked upon as strange. Europe stood for civilization and maturity compared with other parts of the world where both inhabitants and societies were regarded as comparatively juvenile. From one view, all races were born different and the Europeans were most godlike; but from another view, all humans were born equal and the differences in races were due to life conditions. Even though there was a strong belief in Europe as the middle of the earth, the idea of equality among all people grew stronger and sharply contradicted the practice of slavery (Barrera-Osorio, 2006; Hulme, 1990; Liedman, 1997). Moreover, while interest in Islamic culture and arts started to flourish, this only widened the gaps between Europe and Asia. Many Europeans admired the exotic as strange and charming, and employed exotic elements as interesting adornments and façades.¹⁵⁰ This admiration for strangeness did not prevent Europeans from trying to conquer and change the rest of the world to suit their concepts of culture and civilization. There was undoubtedly a strong inconsistency

¹⁴⁹ This phenomenon becomes obvious in the mapping of the world that placed Europe in the middle of the map. Some of the maps from this age are full of information, whether or not anyone had actually studied the mapped areas. If the knowledge was insufficient to describe unknown areas, fantasy could do. On some maps, unknown sites were simply left empty. These foreign areas were categorized as the land inhabited by barbarians, savages, or beasts. The interest in the world had for long been sidestepped by sidereal curiosity; galaxies were even better known than the earth (e.g., Liedman, 1997). Lack of knowledge contributed a variety of opinions about ethnic and national distinctions that often were false.

¹⁵⁰ One of many architectural examples on this admiration is the *Royal Pavilion* in Brighton, UK.

between viewing Europe as the middle of the earth and searching for lost paradise on continents far away. Voyages of exploration had, since the end of the 13th century, all functioned as instruments for European control, and explorations of nature served many other benefits. Therefore, even if these trips had a strong exploration aim, of significant parallel interests often were economic or military benefits (see, e.g., Outram, 1995).

According to Barrera-Osorio (2006), Spanish colonial interest was a remarkable initiator of scientific development.¹⁵¹ After seven centuries of Arabian occupation, Spain had inherited much scientific knowledge to use for mastering the oceans and foreign lands. These scientific investigations were especially promoted when the Spanish merchants, artisans, and royal officials needed to collect information and understand all the new things they confronted on the American continents: strange settings, astonishing plants, animals and humans, lifestyles, and so on. Such scientific curiosity and knowledge accumulation thus mainly served economic and political goals. Bacon had laid down the order for investigations in his *New Atlantis*: the priority of God's creation was the light (McKnight, 2006). According to Bacon, enlightenment through knowledge should be the priority number one on the trips.

Botanic gardens with foreign plants and animals became small European plots of paradise, but these gardens also were found in big cities in the colonies. The expectations were enormous for explorations targeting locations where 'natural humans' were expected to live (Sörlin, 2004; see also Drouin, 1989). After Christopher Columbus' voyage to America, Europeans started to talk about Europe as the 'Old World' and North and South America as the 'New World', something to be explored. In the early Enlightenment, the Europeans held America and its inhabitants closer to the state of nature and more animal than Europe and the Europeans (Sala-Molins, 2006), an argument to which the popular "novel savage writer" Baron de Lahontan objected (Muthu, 2003, p. 24). Foreign people, animals, and plants gained attention as exotic objects for empirical study. Stones, cliffs, caves, and waterfalls became fascinating and admirable as lifted from their context and pictured in travel stories and paintings. The demands on both books and pictures gradually grew towards a larger exactness and objectivity, even when the public preferred a more personal style (Sörlin, 2004; Drouin, 1989). In addition to books, letter writing was a much-employed way of distributing and exchanging knowledge about foreign natural

¹⁵¹ Another country with a tradition influenced by Muslim invasions in the early modern time was Portugal. With its large overseas empire in the 14th century its situation was similar to Spain's.

objects and sites. These voyages were valued as a way to leave old customs and prejudices behind and to learn new things. Rousseau's *Émile* ends with traveling, and traveling also plays an important part in *Julie*. Traveling was thus both real, and a metaphor for how an individual can step outside the common context, take a more objective and critical stand, and view new horizons (Van Den Abbeele, 2003). Similarly to the Ancient philosophers, the modern world valued *the grand voyages* (or *the grand tours*) as a terrific way of learning from the biggest of all books, the world itself.¹⁵² But if there was something to win, there was also something to lose. Real voyaging was connected to anxiety and great risks of dying or suffering some other misfortunes (ibid.).

Recent researches (see, e.g., Harrisson, 2005) emphasize the immediate connection between colonization and diverse messages in the Bible, especially Genesis 1:28: "Be fruitful, and multiply, and replenish the earth, and subdue it" (King James Bible, 1997). Another argument was the Biblical command to spread the gospel about the "true God" to all nations (Harrisson, 2005). Eager explorers defended their intentions with biblical arguments and argued that it was their duty to search for unknown territories and use the things God had created. Likewise Biblical arguments could reinforce dispossession and the right to subjugate people living a life that the Europeans found idle and primitive (ibid.). The sacrifices in life were also legalized by divine obligation. On the long voyages, a many of the crew and passengers were struck by diseases and never reached their destinations, whereas others died overseas, among them many young explorers (Sörlin & Fagerstedt, 2004). Many foreign seeds met the same destiny as the explorers when they reached the cold Northern Europe, and European exploratory vessels brought various diseases to other regions that killed foreign populations. As a result of the English occupation of Hawaii in 1778, more than 75 percent of the native population of at least 250,000 persons, maybe much more, died in epidemics over the next hundred years (Sörlin & Öckerman, 1998). Besides diseases, the colonialists brought drugs and thus spread dependencies among the native inhabitants. But they also brought foreign cattle and weeds, and started intensive cultivation of local plants (e.g., tea, coffee, and cotton) that damaged indigenous ecosystems. Deforestation and drought led to starvation in many places, especially on islands, and several colonial workers gradually became aware of what we now term 'environmental problems' and started to realize that the

¹⁵² Philosophy, theology, and science have all emphasized the idea of nature as a book. According to Plotinus (AD 205-270) the wizard has a talent to read the letters of nature that reveal its order (Pilts, 1991).

native inhabitants might have knowledge that could be valuable (ibid.). But knowledge about the colonies did not always reach Europe: “Among all the countries of Europe there is none in which so many histories and accounts of voyages are printed as in France, and none in which so little is known about the genius and the morals of other nations” (E, p. 451). Why did Rousseau make this claim? Because he meant that people traveled without knowing how to see and learn from what they saw, but also because they did not want to know.

In Rousseau’s mind so-called civilized people, like the French, were no better than the savages. He looked upon all humans as initially equal. Linnaeus, who, like Rousseau, taught that it was obvious that humans were relatives of the apes, did not share his opinion about the savages, but, like many others of this time, Linnaeus was amazed about the big difference between ‘savages’ and educated humans and saw a clear hierarchical order among humans (see Linnaeus 1760/1991b). Despite a growing European interest in equality and human rights, native people and colonial workers could be treated very rudely and it was not uncommon that the status of slaves in the French colonies was lower than that of the colonists’ dogs (Barrera-Osorio, 2006), not to mention the situation for the massive number of people who were transported overseas.

In the 18th century the slave trade reached a significant climax (Klein, 1998; Rediker, 2007). Millions of humans met a brutal destiny from forced marches to the ships, on the crowded voyages, and finally at their ultimate destinations (Cohn, 1998; Rediker, 2007). Beside a huge number of slaves, sailors also met their death at sea at the hands of this cruel business. However, such human waste was calculated in the prize. A slave ship was a blend of war machine, floating prison, and factory; and all the misery was hidden in reports behind tidy statistics in tables and figures (Rediker, 2007). For Rousseau, slavery made humans into things, instead of viewing others as moral agents with rights to be acknowledged as equals (see Dent, 1992). In *Julie* Rousseau has the principal male character St. Preux travel abroad and on his return he condemns slavery in plain words:

I have seen those vast and unfortunate countries that seem destined only to cover the earth with herds of slaves. At their lowly appearance I turned aside my eyes in contempt, horror, and pity, and seeing the fourth part of my equals turned into beasts for the service of others, I rued being a man. (Rousseau, 1782/1997, p. 340)

And Voltaire is very sarcastic in *Candide* when he lets a slave worker in Surinam tell about how brutally he and his fellows are treated because of the Europeans' sugar consumption.

When we work at the sugar-mills and the grindstone catches our fingers, they cut off the hand; when we try to run away, they cut off a leg... This is the price paid for the sugar you eat in Europe. (Voltaire, 1759/1991, p. 62)

The slave in Voltaire's story relates that he does not know if he has made the Europeans happy, but they have definitely not made him happy. The dogs, apes, and parrots are thousand times happier, he states. However, it was not possible to live the same kind of life in the colonies as in Europe. Gradually, colonial societies became threats to European traditions: overseas societies, with their mixed social ranks, genders, and skin colors, triggered new conceptions of world order (Mitchell, 2000). Although cultural diversity was much greater in the colonies than in Europe, a gradual change took place in Europe in this respect, but at an expensive price paid for with lives and dignity. There was a growing protest against slavery in the 18th century, but not until the second half of the century did European political voices start to attack the whole colonial project (Muthu, 2003). Besides Rousseau, one of the first critical voices was Diderot, and, according to Muthu, this criticism depended on his distinct view of human nature, an issue I will clarify later.

The strengthening of the economy, politics, and science that made possible Europe's colonization of the world took place at the expense of ecological problems the conquerors caused in their colonies (Sörlin & Öckerman, 1998). Economy, trade, and industry became a part of the divine Creation. The Greek word *oeconomia* means housekeeping and was interpreted as God's housekeeping, thus making economic aspirations into a kind of religious ceremony (Frängsmyr, 2004). Thus, economy was not just any order; it was a *good* order, a harmonious organization of the parts or qualities of a unit (Faccarello & Steiner, 2008). Linnaeus distinguished between the *oeconomia divina* (also called *oeconomia naturae*, God's wise nature order), *oeconomia publica* (political economy), and *oeconomia private* (individual and family economy) (ibid.). In contrast, Rousseau distinguished between general or political economy and private or domestic economy (DPE). These hierarchic orders were intended to help humans manage natural resources and use them for their survival (Frängsmyr, 2004). European societies adapted a new order and the people

were nourished by new dreams. Colonization had promoted trade and many political spokespersons encouraged free trade (Gay, 1966).

Since the 17th century, French cities were no longer privileged places in the middle of rural areas surrounded by fields, forests, and roads. These cities caused problems of many kinds, but they also gave rise to utopias and plans. In these dreams, the whole nation became a city with the capital as the city center and roads as its streets. A good national organization demanded that the tight city management spread into the entire surrounding areas (Foucault, 1989). Thus, city organization became the norm and city life the most desirable and admirable. Rousseau was anything but pleased with this development. He could not stand the escalation of extravagance lifestyles that followed in the footsteps of urbanization and that steadfastly changed the European living concept. In this developmental fervor, with its passion for global trade and industrialization, the urban lifestyles of the emerging bourgeoisie became the norm while rural life, with its lack of economic progress and cultural entertainments, was deemed untrendy and sluggish. However, Rousseau never tolerated an underestimation of the countryside on behalf of luxury urban life that in any case only was achievable for a part of the city inhabitants. The mirror had a cruel backside even in the cities and the tendencies towards luxury raised lively ethical debates. Rousseau rages against the life of luxury in, for example, his *1st Discourse*, his *2nd Discourse* and *Émile*. Some saw luxury as a sin whereas others argued that it was a human duty towards God to utilize nature (e.g., Frängsmyr, 2004); in Rousseau's opinion, however, luxury was a sign of human degradation (1st D). Using strong words, he called luxury the worst of all evils. He associated lavishness with hot southern winds attacking the crops with myriads of insects causing starvation and death to useful native animals and species. He was actually upset about the unfair tax system that made peasants leave their agricultural occupations and move into the cities, leaving a most urgent task behind them (2nd D).

The Lost Paradise

Despite colonialism and slave trade, accurate knowledge about other cultures slowly reached Europe. In the Renaissance, but also later in the 18th century, a variety of ideas meld into romantic stories about the 'savages'. These ideas got inspiration from, on the one hand, traveler-ethnographers' descriptions of foreign people (e.g.,

native inhabitants in North America, south America, Canada, the Caribbean and the West Indies) and, on the other hand, knowledge about Ancient Greek mythology and inhabitants of the mythological *Golden Age*.¹⁵³ Similar images also came from late Renaissance pastoral dramas (see, e.g., Merchant, 1980). Rousseau admired the famous Italian poet Torquato Tasso's epic writings that portrayed a dreamlike life in the countryside, a fantastic Arcadia where even sorrow is beautiful, with the days filled with music and dance (Sprengel, 1917). On the one hand, non-European cultures were looked upon as more primitive, in a lower stage of cultural progress; on the other hand, their lifestyle was regarded as more genuine.

An unfamiliar feature that awakened disgust was cannibalism, and stories about this practice flourished. The cannibal was thus a negative antagonist to the noble savage. But Michel de Montaigne did not agree with such a negative and prejudicial vision (see Montaigne, 1592/1986b). In his essay "On Cannibals," published at the end of the 16th century, he retells a story he has heard about a tribe living according to the laws of nature. These people lived a happier life than those of the Golden Age poems, he said. Their society has no commerce, no books, no calculations, no officials or political leaders, no wealth or poverty, no agriculture, no metals, and no clothes. In another essay he uses similar characteristics about people in the New World. They have no words for lies, treachery, slander, or envy. Their life is pleasant and most of the time they spend dancing. Montaigne does actually not find their habit of eating human flesh more barbarian than the many brutal ways the members of his own society treat each other (ibid.).¹⁵⁴ Like Montaigne, Rousseau, who was familiar with Montaigne's essays, also gave a positive picture of 'savages', as the next chapter will reveal.

Besides Montaigne, many others wrote both fictive and documentary stories about foreign exotic people, sometimes called 'noble savages'.¹⁵⁵ Tahiti became the land of such savages, after Louis Antoine de Bougainville's description of the island and its inhabitants. In his *Voyage Around the World*, he made Tahitian life sound like living in paradise. Diderot wrote a contrasting account of Tahitian society in *Supplement to the Bougainville Journey*, where he blamed the Europeans for the

¹⁵³ Golden Age—an early joyful time of human life described by for example Plato in *Timaeus*.

¹⁵⁴ An example of the European brutality is the commonly performed infant murdering (see Heywood, 2004).

¹⁵⁵ Rousseau is strongly connected to the mythical character of natural goodness, the 'noble savage', but Rousseau was not the inventor of this myth (Ellingson, 2001). The idea has older roots; and the expression is found in a 17th century drama, *The Conquest of Granada by the Spaniards*, written by John Dryden in 1672 (ibid.; see also Outram, 1995).

Tahitians' vices. Voltaire created a fable about the genuine inhabitants of *Eldorado* in his novel *Candide*.

It was not only true stories about other foreign lifestyles that fascinated the 18th century people; both de Bougainville and Voltaire mixed real places with utopian visions. Also popular were dream worlds and fictive stories, among them the utopian literature genre¹⁵⁶ that had flourished here and there at least since Plato wrote about the sunken island Atlantis in the dialogue *Timaeus*. A utopia was neither a space nor a time, but designed as a means for awakening a reader's critical judgment (Shklar, 1966/2006). The purpose of the classical utopias was to show the errors of human conduct, instead of blaming God, fate, or nature for social misery, and thus to encourage moral reflection (ibid.). Daniel Defoe's novel *Robinson Crusoe*¹⁵⁷ has utopian features; Rousseau appreciated the book and regarded it the only one the young *Émile* needed to read.

Finding a contrast to the depravity of humans' natural origins became a fascinating concern, and Rousseau like many others read about what kind of people the explorers had met and imaged what a 'natural human being' or what 'human nature' might be. Cro (1990) also charges the Jesuit Reductions¹⁵⁸ of Paraguay and the Jesuit order with practically fulfilling their mission by influencing works of writers such as Voltaire and Rousseau. An influential French ethnographer who had traveled widely in North America and Canada, living among indigenous people, was the before mentioned baron de Lahontan (Muthu, 2003). All these writings about the life of the savages reached a broad audience and, among others, they influenced Montaigne, Diderot, Voltaire, and Rousseau.

Rousseau's *1st Discourse* and *2nd Discourse* sharply criticize his contemporary society for being corrupt and announced a contradictory picture of the natural human being. In contrast to Rousseau's judgment of the savages, and in opposition to

¹⁵⁶ Wellknown utopias from the Renaissance are for example Thomas More's *Utopia* (1516) and Tommaso Campanelli's *City of the Sun* (1623). An example of an ironic social critique is the Spanish writer Miguel de Cervantes' utopian *Don Quixote*, a work that expresses the impossible dream of the Catholic utopia, and depicts Spain in a process of decadence and subject to greed and pride (see Cro, 1990). Part one of *Don Quixote* was published 1605 and part two 1615.

¹⁵⁷ This book from 1719 is popularly called Robinson Crusoe, but the whole title is *The Life and Strange Surprising Adventures of Robinson Crusoe, of York, Mariner*.

¹⁵⁸ The "Christian Indian State," as the Reductions have been called, were founded in the beginning of the 17th century in the territory of the present country of Paraguay, the Argentine Provinces of Misiones and Corrientes, and the Brazilian Province of Rio Grande do Sul. At most the number of the inhabitants was more than 140,000 divided across more than 30 settlements (Catholic Encyclopedia, 2010).

Bougainville's idea about the Tahitians, Diderot did not consider the savages' as living in a natural state (Muthu, 2003), but Diderot was upset about the explorers' behavior: "This Tahitian who you want to treat as a chattel, as a dumb animal—this Tahitian is your brother. You are both children of Nature—what right do you have over him that he does not have over you?" (Diderot, 1772/1956, p. 118). Thus, he did not classify them as merely good and their society as an idyll without social or political problems, but instead stated that both virtue and vice are typical human conditions (ibid.). Nonetheless, at this point I want to point out that, despite the fact that Rousseau criticized civilization compared with the state of nature, he never imagined that there was any way back—although Voltaire blamed him in a letter for wanting humans to become quadrupeds again (see Voltaire, 1755/1985). The idea of no return was one of those ideas Rousseau called his "principles." "But human nature does not go backward, and it is never possible to return to the times of innocence and equality once they have been left behind," he unmistakably states (RJJ, p. 213). He develops the same argument in Note IX from the 2nd *Discourse* to convince his antagonists—obviously without success. What he really means becomes apparent in *Émile*, where he writes,

[A]lthough I want to form the man of nature, the object is not, for all that, to make him a savage and to relegate him to the depths of the woods. It suffices that, enclosed in a social whirlpool, he not let himself get carried away by either the passions or the opinions of men, that he see with his eyes, that he feel with his heart, that no authority govern him beyond that of his own reason. (E, p. 255)

Europeans did not just degrade non-Europeans and 'New World' natives; women, Jews and 'lower' social classes also were granted assigned an inferior position (Sala-Molins, 2006). Eby (1952, p. 309) describes the way the French nobles treated their peasants with the words "heartless tyranny." Rousseau confronted inequality in many ways. He ends his 2nd *Discourse* with a powerful sentence on this subject:

[M]oral inequality, authorized by positive right alone, is contrary to Natural Right whenever it is not directly proportional to Physical inequality; a distinction which sufficiently determines what one ought to think in this respect of the sort of inequality that prevails among all civilized Peoples; since it is manifestly against the Law of Nature, however defined, that a child command an old man,¹⁵⁹ an

¹⁵⁹ This relates to Rousseau's argument that it was wrong both to command children and to let them command (see *Émile*). The capital letters are original.

imbecile lead a wise man, and a handful people abound in superfluities while the starving multitude lacks in necessities. (2nd D, p. 188)

Although Rousseau claimed equality, he touched on gender very gently and conventionally in comparison to Diderot. While Diderot blamed European societies for its almost criminal unequal treatment of women in *Supplement to the Bougainville Journey*, Rousseau's opposition to urban life involved praising traditional family patterns, instead. Like the 'savages', women were since long classified as closer to nature than European men. Trials against women suspected to be witches did not disappear until the beginning of the 19th century, although the number of them declined during the 18th century (e.g., Davies & de Blécourt, 2004). The definition of women's role in 18th century society became complicated; they were regarded as emotional, naïve, and incapable of reasoning, but at the same time they were supposed to be the foundation of the family and the educators of their children. The role of women, however, differed completely due to social class. The gender problem was not only connected to the hierarchy of civilized to 'savages', but to social equalities in Europe, and to the enigma of nature in general (e.g., Sala-Molins, 2006). Rousseau's opinion on gender earned him many enemies, especially among women; and I will return to this issue in Chapter Six.

In addition to the social critique initiated by stories about 'savages', another critique favored China over Europe. Among others, Voltaire, Leibniz, and Christian Wolff saw Chinese politics as superior to European politics. Leibniz even suggested that China should send missionaries to Europe (Muthu, 2003) and Wolff shocked his audience at the University of Halle implying that the wisdom of Confucius was superior to Christianity (Gay, 1966). Rousseau did not share this view, as becomes evident in his 2nd *Discourse*, where he argues that science has not purified the morals in China more than anywhere else.

Fervent Classification

During the 17th century, when natural history was situated between the living beings and their names, classification became a form of episteme. Knowing became equivalent with interpreting. Classification and ordering became a major undertaking, thanks to the written, especially published, word. Language and its publication became a tool for exploring, expressing, separating, and naming all living beings.

While God created the world through his word and named the creation, Bacon meant that humans had to use their minds to understand the universe and govern the creation (Matthews, 2008). The ordering was mostly an attempt to separate ‘things’ based on differences more than their kinship; in particular, the strange was detached from the common (Foucault, 1970). It was also a kind of exploration of a kind of a natural economy, where all parts had a place in an entity. It became a human duty to open and read the book of nature and interpret it (see Harrisson, 2005, 2006). Reading, however, is dependent on words that become still clearer in combination with numbers and pictures. Books and letters connected geographic distances, and one’s experiences became another’s possession in form of knowledge. Between the acting subject (the one experiencing) and the reader (the receiver of the story), the written word became a (supposedly) objective stage. Knowledge received by a touch of one’s own bare hand or one’s own eyesight was transformed into the impressions of the naturalistically written stories, collected materials, and illustrations. The words, the examples, and the pictures drew human imagination nearer to exotic places but, in the process, increasingly detached humans from real experiences of nature. So did mathematical formulas, instruments, and other equipment: while these made many natural matters easier to understand, they intervened between authentic nature and humans. Although the aim was to create realistic knowledge, nobody could prevent the fantasy from drawing its own conclusions. Therefore, in his recommendations for the education of children, Rousseau rejected knowledge that took the form of representation:

In general, never substitute the sign for the thing except when it is impossible for you to show the latter, for the sign absorbs the child’s attention and make him forget the thing represented. (E, p. 170)

While the entire natural world was looked upon as an organized unit, despite a chaotic first impression, all the parts that made up this general order had to be classified to reveal the whole system. One of these parts were the plants and while botanic gardens became both a popular study issue and a hobby, more and more plants were classified and identifying ever more plants was a way of comprehending the natural world better. To know nature was analogous to being able to classify and identify species by names (see also Krook, 1979; Drouin, 1989). Also, in Rousseau’s opinion, “to allow the study of Botany and reject that of nomenclature is to fall into

the most absurd contradiction”¹⁶⁰ (BW, p. 99). Why then this eager occupation with naming? One primary answer is that a general premise of the Enlightenment was "to name is to know." Thus, analysis in all fields broke entities into their parts and named the parts. According to Foucault (1970) the answer is that history attained another meaning than before; instead of relying on resemblance and searching for unifying features (see above), it came to depend on examinations and giving the explored items neutral and realistic names. The organizing was now based on visible characteristics, instead of functions and invisible features. Sole reliance on documents gave way to also creating places where items from nature were juxtaposed in collections; for instance, herbariums, museums and gardens. Foucault (1970) describes the shift from Renaissance to Enlightenment as the shift from the “theatre” to the “catalogue,” a new way of making history where things are connected both to the eye and to the words of discourse. Side by side, the stones, plants or animals should present themselves under their own names. Instead of telling stories about organisms based on what was known and told about them, both truths and myths, the new story dealt with strictly objective descriptions. I will let Foucault express it in his own words:

Natural history finds its locus in the gap that is now opened up between things and words – a silent gap, pure of all verbal sedimentation, and yet articulated according to the elements of representation, those same elements that can now without let or hindrance be named. (Foucault, 1970, p. 129-130)

According to Foucault (1970), natural history in the 18th century is interlinked with a theory of words and is based on language. To know nature, is to know the right words that denote the difference between biological species, families, and kingdoms. Here again the differences between the natural human being and the civilized, the savage and the European man, were highlighted. The common belief was that humans in the state of nature had no language (2nd D, EOL). So, the civilized human being could organize the whole of nature, the whole world, by communicating with written words. In addition to words about the world, maps and other illustrations and the things in it came to represent the real world and became objects for scrutiny. The real world, including humans, was replaced by an order of representations where words, pictures, miniatures, shows, and so on, came to represent reality (see Foucault, 1970).

¹⁶⁰ *Nomenclature* stands for the naming of organisms in scientific classification.

Instead of a connection between human beings and the rest of the natural world and the whole universe on the basis of likenesses as expressed in symbolic similarities, the connecting points or the joints were shaped through representations. Humans who entered the observing stage became both observers of the ‘human’ and objects for ‘human’ observation. History provided clues for self-understanding and tools for self-development. Among all the ‘things’ of the world, humans were regarded as the most extraordinary. In his 2nd *Discourse*, Rousseau saw humans studying humans as very problematic. This merging of the studying subject and studied object still makes it so difficult for humans to learn to understand their own species. How can one look objectively at oneself or one of one’s own kind?

Script had long been regarded as holy and, as we saw earlier concerning Bacon and Comenius, many believed that all the knowledge of the world could be gathered in one book. Linnaeus’ interest in the classification of all living things in his great catalog *Systema Naturae* was not only methodical, it was also a mark or proof of God’s existence and exceptionality (Munck, 2000), and Linnaeus was actually called “the second Adam” (Broberg, 1978).¹⁶¹ However, this project for classifying and cataloging of all living things did not produce agreement about how to proceed. Yet, Linnaeus’ system was so much simpler and more convenient than all previous that it gradually surpassed the others in acceptance and use.¹⁶² Linnaeus started to see his task as one of exposing God’s plan for creation, and he sent a great number of his students, especially his *disciples*¹⁶³ (numbering around twenty), on long hazardous trips to classify nature around the world (Sörlin, 2004; Sörlin & Fagerstedt, 2004).

Linnaeus’ undertakings were not merely divine; they also were driven by utilitarian interests. According to Linnaeus, God used him to explore creation, conduct studies of nature, and make Sweden a wealthy nation, and Europe a rich

¹⁶¹ “And out of the ground the LORD God formed every beast of the field, and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field....” (The Readers Bible, 1951, The Book of Genesis, Chapter Two, p. 9).

¹⁶² Linnaeus’ system had many competitors who built their systems on cornerstones different than his focus on reproductive organs (see Drouin, 1989; Foucault, 1970; BW). One of Linnaeus’ forerunners was the earlier mentioned John Ray, who also had developed a classification system for organisms (e.g., Huxley, 2003).

¹⁶³ One of these disciples was the Finnish botanist Pehr Kalm who brought home hundreds of seeds, roots, and bulbs from North America and Canada (Frängsmyr, 2004). While most of the collected material died in the cold Finnish climate, a large herbarium and many notes remained. Nevertheless, his compilation and experience helped him to create a botanical garden and put together a Finnish flora. Like Linnaeus himself and many others of his disciples, Kalm had a pragmatic and commercial aim. (Finland was not an independent nation at this time, but incorporated with Sweden until 1809.)

region. Many seeds and plants were shipped to Europe from various widespread explorations for botanical gardens, private collectors, park owners, and medical stores. Linnaeus' international influence was great and his position was like an emperor of the botanic empire. But he also attempted to classify and order human beings and distinguish them from the other animals (Sörlin, 2004; Sörlin & Fagerstedt, 2004; see also Drouin, 1989). According to Foucault (1970), the ordering of things during the Renaissance involved a searching for relations of resemblance that became noticeable through many types of symbolic likeness. For example, in comparison with the belief that a plant's shape revealed its character or medical use (e.g., if the leaf reminded one of a lung, the plant was good for curing lung disease), whereas modern classification arranged the plants, animals and things in an order based on dissimilarities between their visible features. The description of a specific plant should be so precise and general that anyone carefully examining it should come up with the same label (*ibid.*).

However, Foucault did not think that it was because of a widespread interest in botany that plant classification was so popular; more likely was that it was so much easier to find names for plants than animals by reference only to visible features (Foucault, 1970). It is in general easier to classify plants and they are easily available, even if the gardens also contained some animals:

Plants are naturally within our reach. They are born under our feet and in our hands, so to speak ... Botany is a study for an idle and lazy solitary person: a point and a magnifying glass are all the apparatus he needs to observe plants. (RSW, p. 64)

It was of course much more complicated to kill and dissect animals than to gather plants. Even the cultivation, transport, and storing of plants was much easier, and Rousseau colorfully lists the complications related to the study of animals:

To study them [animals] according to their habits and characteristics, it would be necessary to have aviaries, fishponds, cages; it would be necessary to force them, as best I could, to remain gathered together around me. I have neither the desire nor the means to hold them in captivity, nor the necessary agility to chase after them when they are at liberty. It will be necessary, then, to study them dead, to tear them apart, to bone them, to poke at leisure into their palpitating entrails! What a frightful apparatus is an anatomical amphitheater: stinking corpses, slavering and livid flesh, blood, disgusting intestines, dreadful skeletons, pestilential fumes! (RSW, p. 63)

He ended this recital with: “Upon my word, that is not where Jean-Jacques will go looking for his fun” (ibid.). So instead of animal studies, Rousseau’s botanical hobby occupied much of his time, and he read Linnaeus and other botanists, collected local plants, participated in correspondences about, and in the concrete exchange of, exotic plants. In a short letter to Linnaeus (written 1771) Rousseau calls himself a “zealous, disciple of your disciples” and, among other things, he writes: “Farwell, Sir; continue to open and interpret for men the book of nature. For me, content to decipher in your wake some words in the pages¹⁶⁴ of the vegetal realm, I read you, I study you, I meditate on you, I honor you, and I love you with all my heart” (BW, p. 244). He even states that he finds more pleasure in Linnaeus “philosophia botanica” than from any book about morality (ibid.). But, although Rousseau admired Linnaeus, cherished his greatness, and used his classification system, he also blamed Linnaeus for having studied nature too much in herbaria and gardens instead of in wilderness settings (BW). Linnaeus was a naturalist, and Rousseau would most certainly have agreed with Foucault’s description of a naturalist: “The naturalist is the man concerned with the structure of the visible world and its denomination according to characters. Not with life” (Foucault, 1970, p. 161). However, this is not really fair, because Linnaeus also had a profound interest in genuine nature (see also Attfield, 1994).

4.4 New Learning

Bacon’s proposal for new institutions of learning was not an isolated initiative; in the early 17th century a network of alternative institutions for higher learning spread all over Europe, but were most common in Italy. These research centers were separate from the universities and maintained by amateurs. They were a part of the struggle for the autonomy of science from the Church, and reflected the view of time that Latin and Greek were the only languages adaptable for scientific communication (Bowen, 1981). Despite differences at many levels in Europe, a positive belief in education for all flourished. Education became an instrument for transmuting utopian dreams into reality. At the end of the 18th century, global competition forced European governments to start diverse educational reform programs aiming at

¹⁶⁴ While Rousseau uses the French word *feuillet* that means both leaf and page, this sentence can have a double interpretation (Butterworth, Cook & Marshall’s Note 323 in RSW) and may entail both Linnaeus’s books and ‘the book of nature’.

producing a healthy, educated population (Parry, 2000). However, the struggle for educational reform had actually started much earlier and went hand in hand with the fervent reproduction of knowledge and distribution of publications for an increasingly literate public.

Many Enlightenment thinkers believed it was possible to improve human life through an education built on in-depth knowledge about human nature. Despite considerable concern with education and even many radical intentions and ideas concerning education, practical teaching did not change very dramatically. Nevertheless, these thinkers got the ball rolling. Education took on a strong position in preparing people to live in a way that followed the principles of nature. The natural world was represented as pictures, tales, heteropias, and utopias, often as a 'machine' in a steady process of operation. Learning to control such a gigantic machine was a huge challenge. This machine could improve a free and happy human life and show the means to a better future.

Vast Knowledge Compilation

The possibilities for making one's own opinion public were remarkably improved when the number of published newspapers and books increased. Print sources of knowledge included both popular and scientific issues and reached a growing number of readers. However, reading and writing were not widespread; at the beginning of the 18th century, a majority of the European population had no education and was more or less unaffected by the Enlightenment's spreading of knowledge about the world (e.g., Bowen, 1981; Heywood, 2007). For some, the world was still flat (Liedman, 1997) but for those who were able to read and write this planetary view was corrected. Yet, many efforts were made to get the masses educated. The tolerant intellectual climate of the Enlightenment opened the door, as well, to diverse visionaries, pseudo-scientists, quacks (Gay, 1966), and critics of many kinds. Sometimes the critical tone was extremely satirical; Voltaire was a master of that genre, but not the only one. A growing literature genre included autobiographies and novels. In addition to novels and other fiction, discussion of politics, ethics and education (etc.) became more widespread and were written in local languages instead of Latin. Rousseau, like many others, grabbed the chance to reach a broad audience and published his thoughts in various types of books, among them fiction. The novel

Julie, or the New Heloise soon became a bestseller; in fact one of the most successful international books of its time (Stewart, 1997). Rousseau included most of his central philosophic premises in this story that would reach an extended group of readers. His attempt with the book was to lay out a model for a domestic moral theory (JNH).

Among print sources, modern encyclopedias aimed at targeting a broad audience.¹⁶⁵ The immense French *Encyclopédie* reflected the belief in knowledge systematically arranged and unified in one source. The outline was partly grounded on Bacon's division of knowledge and it was published between 1751 and 1780 in more than 30 volumes, including 11 volumes of illustration plates. A great number of its authors are well-known: the editors Diderot and Jean le Rond d'Alembert, and among the authors were, for example, Voltaire, Baron de Montesquieu, and Rousseau (see Wilson, 1967/2006). Rousseau was engaged in the project from its beginning and wrote articles on music and economics, but later he broke with the encyclopedic group. The *Encyclopedia* was not only a great undertaking for accumulating and ordering knowledge; it was also a great attempt at changing the usual ways of thinking (ibid.). It was concerned with ethics, political theory, and aesthetics, and it opposed religious intolerance and dogmatism (ibid.). But Diderot soon realized that knowledge is ceaselessly changing and growing, and that the project could never end (Morly, 1891). A tension thus existed between assembling material in an organic synthesis and maintaining both an open mind and autonomous thinking.

Typical urban meeting places for the exchange of ideas were theaters, concert halls, and so-called 'salons' (Swenson, 2000). The practice involving salons had traditions in 17th century court society, especially in France. Aristocratic women gathered groups of intellectual people in their homes to discuss literature and philosophy. These gatherings were hotbeds for young writers, even those from 'lower' classes; they were places where writers could get comments on their literary products before publishing and publically exchanging ideas with other thinkers. The salons were thus places where women were in the role of 'intellectual mothers' and could have an effect on intellectual debate (ibid.). Rousseau was very critical of salon

¹⁶⁵Bacon undertook a large project for a scientific encyclopedia, *Instauratio Magna*, which was to contain 130 sections divided into three themes: external nature, man, and man's actions on nature. However, only a part of this project was completed, but he succeeded in devising a new classification of knowledge. Another compiler of an encyclopedia, published in 1630, was Comenius' teacher Johann Heinrich Alsted. Criticism became a verbal weapon in Pierre Bayle's *Dictionnaire Historique et Critique* (Historical and critical dictionary, published 1697) and an inspiration to the immense French endeavor, the *Encyclopédie*¹⁶⁵ (Encyclopedia), that at first was only intended to be a translation of Ephraim Chamber's lucrative *Cyclopedia* (May, 2002; Wilson, 1967/2006).

practices, but these institutions undeniably gave him the opportunity to become widely noticed and in contact with influential people. In contrast to the aristocratic salon tradition, other popular meeting places for reading newspapers and books and for exchange of ideas were the coffee and tea-houses in European cities that served colonial products like coffee, tea, and sugar (ibid.). Other public places where people (mostly men) encountered the written word became places for interaction between theories and real life. Readers and listeners stood at the intersection between daily practice and ideas and had to, on the one hand, interpret texts according to their previous experiences and, on the other hand, put the words into action (see Swenson, 2000).

Education in Accordance with Nature

In the late 16th century, Western education had started to change and deliberations aiming at a better world criticized existing educational systems and methods (Bowen, 1981). Attempts at reforming education were not, however, ever uniformly agreed to; instead, they involved a struggle between uncompromising forces, especially the churches¹⁶⁶ and the state, and education easily became a target for religious-political conflicts (ibid.). The French Renaissance humanist François Rabelais had already set out on a more than thirty-year long attack against Catholic education and created a critical atmosphere in France in the middle of the 16th century (ibid.). He suggested that education should be more concerned with real life and encouraged a rigorous study of the physical world, as well as studies of humans.

In the 16th century, Montaigne's *Essays* included practical and philosophical arguments for various areas of life. These made an impression on Rousseau, especially on his educational thoughts, and Rousseau mentions Montaigne many times in his writings (e.g. RSW). Like Montaigne, he declares that among the few relevant books he has read are those of Plutarch, and both Rousseau and Montaigne also lean a lot on Plato's educational thoughts in the *Republic* and the stories about Spartan education Plato presents in the *Laws*. For Montaigne, studying theories made up by others and reading many books does not make a person wise (Montaigne,

¹⁶⁶ In England and the German territories the church was Protestant and in southern Europe Catholic, but in France both existed (Bowen, 1981).

1592/1986a, 1592/1986c). Instead, his proposal was that everybody should trust his¹⁶⁷ own philosophy and learn to know himself. But he also argued that the teacher has to present diverse views from among which the pupil is to decide. Truth and knowledge are common goods and become everybody's own possession through individual judgment, said Montaigne: the best way to test one's reason is by using it. Education should strive to develop this judgment, the freedom to think independently, because an education that destroys our ignorance is not enough; it has to make us better (ibid.).

Montaigne (1592/1986a) described his educational method as easy and natural, because it includes no violence, punishment, or force and is instead built on reason, wisdom, and sensitivity. And he pointed out that not just the soul needs education; virtue also requires a healthy and robust body. Education thus involves training both body and soul at the same time and with social purposes in mind (ibid.). Montaigne's educational proposals were not a sign of what was practiced commonly; quite the opposite. His proposals were a satirical critique of the customary humanist schools, teachers, teaching methods, and curriculums. In addition to Montaigne, other critical voices also made attempts to transform French education in the early 16th century, among them Guillaume Budé,¹⁶⁸ who influenced the establishment of the humanist higher educational institution Collège de France (also known as Collège Royal). But the effect of reform work was belated due to the opposition of the strong Aristotelian scholasticism that had been inherited from medieval Christendom (Bowen, 1981). Another rebel against this scholasticism was the humanist Pierre de la Ramée.¹⁶⁹ He rejected the logic of Aristotle and emphasized deductive reasoning built on mathematics as the principal method for reaching the truth. The resulting 'ramism' was a conflict between religious and political motivations. Ramée was not allowed to teach philosophy at the University of Paris, his new ideas met censure, his books were burnt, and he was finally murdered in 1572 (ibid.). French education was far from stable at this time.

Education during this period had a threefold purpose, according to Foucault (1970): to promote, firstly, rationality in the quest for equal freedom; secondly, supernaturalism; and finally, loyalty towards Ancient conceptions. In reality, learning

¹⁶⁷I use the male pronoun, because in Montaigne's essay about education, originally a letter, he refers throughout to a boy.

¹⁶⁸ Guillaume Budé is also known by his Latin name Here Budaeus.

¹⁶⁹ Pierre de la Ramée is also known by the Latin name Petrus Ramus.

was about understanding signs and to know was to interpret the things in the world with the help of the marks God laid down in nature, in the Scriptures, or as they were presented by the Ancient sages. Knowledge was in effect a fusion of the world and words. The truth about the world was hidden in the language, and the most powerful language was on paper. “Writing ... is the active intellect, the ‘male principle’ of language” (Foucault, 1970, p. 39). Through written language, limitless number of ever-new interpretations of truth and reality steadily came to light. Accordingly, Western education consolidated literature as its center of attention.

Comenius had great faith in the written word. The education he portrayed in *Didactica Magna*¹⁷⁰ (1628-1632) has a large aim: to be a complete book of how to teach everybody everything—women as well as men. Humans are not good, but they can be educated to become good and godlike. Nature is the same as God’s providence, a good force operating in all human beings with the purpose of bringing harmony and love to God. Comenius wanted to organize education into a whole where every part interacts like the parts of a tree. The tree metaphor shares resemblance with the Biblical ‘tree of knowledge’. For Comenius, humans are born with the capacity of understanding the quality of things through the help of their senses. Their reason is unlimited, and they can collect knowledge from far away in both time and space. A human being is a microcosmos in a big world, the macrocosmos. She has all the inherent equipment for illumination. Referring to Aristotle, Comenius calls the human mind an empty writing desk (*tabula rasa*) ready to be written on. But, unlike an actual writing desk, there are no limitations for how much it is possible to write ‘on’ a human mind. He stressed the resemblance between the miniature human soul and the giant world and saw them both as harmonious clockworks driven by many wheels. In Comenius’ view, the primary wheel of the soul is the *will*, and desires and affections drive the soul in a variety of directions. However, human reason is the key that can end or start motion in one direction or another. Education makes human beings humane, teaches them to work, and to use the natural world they have received. According to Comenius, schools are workshops for the education of humans. Comenius’ education is gender-equal and social; thus it is no private matter and should take place collectively in official schools.

¹⁷⁰ The title *Didactica Magna* reminds one of Bacon’s great works *Instauratio Magna* (*Great Renewal*). Bacon wanted to revolutionize learning with a five-part work, but only two were realized: *Advancement of Learning* and *Novum Organum*.

During the 17th century, there was a conflict in Europe between democratic and aristocratic educational policies, and Comenius' followers represented the democratic line (Eby, 1952). Another controversial issue was the education of girls: formerly, girls and women had mostly been left out of—even intentionally excluded—from general educational practice. An interest in inner mental processes arose in the early 17th century and led educational reformists like the German Wolfgang Ratke¹⁷¹ to search for natural educational methods instead of the rudimentary instruction practiced in schools of those days. He studied in England and became acquainted with ideas from Bacon's *Advancement of Learning*. Both Comenius' and Rousseau's educational systems share similarities with Ratke's (ibid.). Comenius (1628-1632/1989) stressed that instruction has to fit human nature and the right phase in the pupil's development. Rousseau (E, p. 34) claims that the education he portrays in *Émile* follows "the march of nature" and should "be suitable for man and well adapted to the human heart." To make instruction more explicable, Ratke, the Port Royalists, and Comenius started to use pictures and maps to clarify texts in books for children. Comenius envisioned phrases from the Latin language parallel with passages in the child's own language in his *Visible World in Pictures*¹⁷² (*Orbis Pictus*), one of the first illustrated textbooks for children. Nevertheless, Rousseau did not illustrate his books or write books directly for children.¹⁷³

Undoubtedly, Rousseau's educational thoughts differ considerably from those of Comenius, but they also share similarities. When Rousseau states that "plants are fashioned by cultivation, man by education," it sounds precisely like a cut from *Didactica Magna*. Both theorists emphasize harmony as a human goal and reject instruction by unpleasant methods.¹⁷⁴ Bodily health and robustness are other common intentions, because for Comenius (1628-1632/1989) the body is the lodging place for the divine soul while Rousseau argues that a weak body makes the soul weak. The body must be strong to obey the soul like a good servant. The weaker the body the more it will rule and house bodily passions (E). However, Comenius' strict organization of education into many separate subjects differs completely from *Émile's* liberated education. But Rousseau's education theory in *Émile* applies to a fictive character and not as applicable to real-world schooling. Rousseau mentions as

¹⁷¹ Ratke is also called Ratisch.

¹⁷² *Orbis Pictus* was originally written in 1658.

¹⁷³ Rousseau's *Botanical Writings* were illustrated by P. J. Redouté in 1805.

¹⁷⁴ Rousseau objected to learning facts by force, but he emphasized forcefully promoting freedom (more about this in Chapter Six).

his model Locke who, like Rousseau, was influenced by Montaigne's educational theories. Locke emphasized that all knowledge is empirical. Like Comenius, Locke implies that the human mind is a *tabula rasa*, an empty place waiting to be filled with knowledge.

The senses at first let in particular ideas, and furnish the yet empty cabinet, and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards, the mind proceeding further, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the materials about which to exercise its discursive faculty. (Locke, 1693/2001, p. 30)

Contrary to Plato and Descartes, Comenius and Locke thus argue that human beings do not have any inborn knowledge: humans are not born with any ideas, only an ability to produce ideas that represent experiences of reality. Rousseau's words in *Émile* correspond with Comenius' and Locke's view:

We are born capable of learning but able to do nothing, knowing nothing. The soul, enchained in imperfect and half-formed organs, does not even have the sentiment of its own existence. The movement and the cries of the child who has just been born are purely mechanical effects, devoid of knowledge and of will. (E, p. 61)

Comenius steadily refers to Seneca and the other Stoics in his *Didactica Magna*, and Rousseau has adapted much from Stoic philosophy in his instructional advice. The same is true for Locke who saw unhappiness as largely the individual's own fault and advocated an education that aims at "A Sound Mind in a Sound Body" (1693/2003, p. 83) for a happy state in the world. When it comes to desires, Locke wanted to train children to deny their desires and long only for what is good for them. Rousseau agreed with that and stressed that the best way to make children unhappy is to let them obtain everything they want, because when they get all they want, they will always desire even more (E).

In order to educate the pupil's mind a good tutor is extremely important. While good-breeding and prudence are most important for the child, the tutor also has to be well-bred and familiar with the world and the country, according to Rousseau. Locke wrote down many practical instructional advices in detail in his *Some Thoughts Concerning Education* (1693), and Rousseau included many of them in *Émile's* world. In opposition to Rousseau's pupil, who is raised alone with only his tutor's

company, Locke's pupil is raised in a social environment (the family) with the purpose of becoming a gentleman who has learned justice and acceptable behavior. Locke (1693/1989) also pointed out that children should learn to treat all living creatures well. Good behavior is more important than foreign languages and grammar. In Locke's opinion, education should first train children to love and to esteem knowledge and, if they want, they can then be taught how to search for knowledge. The instruction of children should be free from pressure. Learning should involve playing games: reading and writing have to be fun, Rousseau claimed. Rousseau took Locke's quest for empirical education seriously. Émile not only studies nature and learns scientific methods; he has to invent the science himself. There are also obvious dissimilarities between the educational thoughts of Locke and Rousseau. Locke's primary education aimed at making the child social, whereas Rousseau first focused on freedom and, on that basis, then on the sociality of the 'social contract'. I will return to Rousseau's thoughts about education in Chapter Six that concentrates solely on this issue.

Curiosity for the Body

Rise of interest in the care of the body in the 18th century can be seen both as a concern for the individual and as a social and economic matter. Healthcare, especially in the form of preventive hygiene, can be a sophisticated tool for utilizing the individuals' bodily power maximally for social purposes such as labor; then care of the body becomes a political instrument targeting a whole population. Foucault (1994, 2000e, 2000f) argues that eagerness for health instruction in the 18th century was caused by the awareness that a sick population is unproductive. Society therefore needed a means of ensuring that an individuals' utility constantly increases. In order to face this problem the family came into focus as the site for the education of and role-modeling for the children. The more healthy children who reached adulthood, the better were the country's profits. But while good health was beneficial for both country and an individual, the family became the target for health education through a link between the state and individuals (Foucault, 2000f). The strategic power/knowledge phenomenon Foucault calls *biopolitics* was born; a form of practice where the human body becomes a productive force and medicine a biopolitical strategy. It was in society's best interest to promote corporally healthy,

secure, and productive individuals (Foucault, 1997g, 2000e). The doctor became a person with power to control the population by prescriptions concerning food, drink, clothes, sexuality, and so on. To secure normality, birth, death rates, and health care were included in the political economy as a kind of capital (Simons, 2006).

In addition to Rousseau's task of educating an autonomous individual; his books *Émile* and *Julie* could also be seen as an adapter of the physician model to a larger population. For Rousseau, illnesses were unnatural. In the 2nd *Discourse* Rousseau blames civilization for causing illnesses. Life is filled with inequalities where some work too hard and others too little, some eating too refined food and others food that is too deficient. A life, filled with constant vigilance, sorrow, and fatigue, causes diseases that are uncommon in nature, according to Rousseau. The savages were healthy until civilized people came and destroyed them with intoxicants (2nd D). When he recommends breast-feeding babies, simple vegetarian food, and physical activity for older children, he blends Stoic and his contemporary doctors' advice with religious aims in order to bring about healthy and resistant children and adults (see E). Rousseau was, however, very restrictive concerning medical care and medicine in the 2nd *Discourse* and *Émile*; to such a high degree that he regrets it in *Reveries*. Rousseau shared many ideas about children's' health education with Locke, but also with his contemporary Théodore Tronchin whose education combined theology, medicine, and philosophy and whose opinion was that sickness has to be prevented with a lifestyle that is in harmony with nature (Sprengel, 1917). Professor of medicine Linnaeus also proclaimed a natural lifestyle and preventive healthcare under the name of *diaeta naturalis* (Frängsmyr, 2004), and even Voltaire (1755/1985) promoted healthy nutrition. When Rousseau claims that "in foods I would always want those which are best prepared by nature and pass through the fewest hands before reaching our tables" (E, p. 345) one would easily think the argument comes from a current discussion about sustainable lifestyles.

4.4 Conclusion

The question this chapter has tried to answer is *What discourses about nature, knowledge and education inspired Rousseau?* My intention with this chapter has not been to paint any complete or even general picture of the time prior to and contemporaneous with Rousseau's life, but to provide a sample of discourse topics

related to nature, knowledge, and education. This display tries to trace how human beings relation to nature gradually was reshaped during the 16th, 17th and 18th centuries. By providing this context I have intended to show that the natural world gradually lost its magical and incomprehensible character and achieved a more objective and distant character in the 18th century, following a process initiated much earlier. Foucault's regularity principles, exteriority, reversal, discontinuity, and specificity showed the route through a myriad of discourses and discourse clusters with themes that included and had inspired Rousseau. The altered position (reversal), founded on three views—nature, knowledge, and Rousseau—was a fruitful combination that highlighted many interesting links between ideas. Through these various sources (i.e., the principle of discontinuity), the widespread use of the concept of “nature” became especially obvious. Surely, I could have mixed and twisted the material (i.e., specificity) still more, but the study this far has already revealed many remarkable things.

The study confirms that it is impossible to separate the history of philosophy and education from the history of economy and politics. Philosophy, education, economy, and politics are in such complex relation that their separation is infeasible, and all the leading views of nature likewise interact with these areas. Worldly issues thus intertwine and connect in patterns that are impossible to separate. Many matters connected to the intellectual and practical history of the earth and its inhabitants affect the history of education in ways that are similar to the history of philosophy. It is these interconnections I have tried to show by means of selected voices. Particular philosophers or critics do not necessarily reflect unique thoughts, but some of them are talented spokespersons, elaborators, and intermediaries for a great deal of new and old thoughts, although historical research never can capture all of them. If philosophical discussion, on the other hand, concentrates only on individual persons' ideas and specific elements of their thoughts, the debate easily loses its sense and becomes mere hair-splitting. Consequently, by linking different peoples' thoughts to a particular context, it assures a greater understanding of why these persons wrote and acted as they did. One problem is, of course, that the task of shaping a framework will never end, so the researcher has to put a period somewhere. Rousseau was a critical person, but also a creation of his time. He did definitely not shape his thoughts in a vacuum. Despite his controversial style, Rousseau was a son of the Enlightenment with strong roots in the Renaissance, but his influences came from many sources and ages, not in the least the Ancient Greek and Greco-Roman Antique

with Plato, Plutarch, and the Stoic philosophers. Rousseau was also not unaffected by what took place among his contemporaries; he was very good in seizing upon urgent discourse issues and using them in many different and often controversial ways, both supporting and opposing issues and ideas with zealous arguments. My intention has not been to study the thoughts of those persons that have influenced or argued most eagerly with Rousseau, or those who have been most close to him, but more to show the diversity of views on the issues under consideration.

In Enlightenment discourses, the concept of “nature” was central and had a broad meaning; it denoted the human character, the natural (physical) world, and the whole globe and much of the whole universe as God’s entire creation, since this time saw no total cessation of religion. Actually, “nature,” on the one hand, was a word expressing an entire matrix, a pattern of something genuine and good, something desirable. On the other hand, it was something to conquer with help of reason. “Nature” was thus both a noun and an adjective, with both positive and negative values, and had a direction that looked both forward (visionary) and backward (historically). When “nature” was a name for the material world, it was concrete; if it denoted something divine or regarded as a great truth, it was abstract. The word “nature” was definitely not used with any consistency. “Nature” could be something good or bad, something right or wrong, the whole world or its parts. It became important to get to know, to study carefully, and to give order to material nature; a kind of safe way of guaranteeing a secure life on earth and taking control of all natural elements. Nature studies could entail observations and gathering outdoors, experiments in laboratories, mathematic, and philosophical studies. Nature became a model for how to be a virtuous and good person and how to organize just and equal societies. God spoke his word through ‘the language of nature’. Nature could, therefore, even be a proof of God’s existence or at least on the human godlikeness. Nature as a resource in the hands of scientists with the perfect methods could open the door to a better world where humankind perfects itself (see Passmore, 1970).

Lähde (2008, p. 215) emphasizes that conceptual indifference can “open up new contrast spaces” and that “it was precisely the malleability and confusion in the meanings of ‘nature’ which made the word and its derivatives (natural right, natural law, state of nature, etc.) so useful in the philosophy of Rousseau’s time.” Although “nature” was a popular concept, it did not necessarily tie humans to their materiality as one among the many animals and as a part of the entire natural world. The much-favored Renaissance images of the human mind as superior to the body and of human

beings as superior to other animals instead grew stronger during the Enlightenment, despite numerous objections. The human mind was more than ever the focus of attention. Simultaneously, it is obvious that “nature” acquired a strong *rhetorical power* that embraced many fields of interest; for example, science, politics, philosophy, and education. The diffuse concept of “nature” continued to be a key in modern, up-to-the-minute discourses. But by the Enlightenment, the multiple meanings of the words “nature” and “natural” had gradually started to change so that the whole natural world could be easier handled and organized. “Nature” was to become an object in the hands of ‘civilized’ people, and “the natural” was something primitive or exotic.

Neither religious spokesmen nor philosophers nor novel writers could prevent the increasing exploitation of nature, or the cruel treatment of slaves and colonial native populations. A general and inescapable obstacle of the Enlightenment is the conflict between ethical theories and practice. What *is* (reality) was separated from what *ought* to be (values) (see von Wright, 1993). Perhaps geographical distances and traditional prejudices made the quest for equality difficult to realize politically and practically. The colonization, explorations, and exploitations of foreign territories were defended with scriptural arguments and connected both to the scientific development and to Enlightenment discourses; and it is difficult to consistently distinguish what came first, scientific curiosity or the journey, the stories about the savages or the thoughts about what a human being is. Colonization and the Enlightenment were actually parts of the same project, as Outram (1995) concludes.

Many of the Enlightenment writers demeaned the non-European’s ways of being in the world as immature; the European outlook based on scientific and thus objectively verifiable experiences appeared to be the highest form of knowledge. Differences from the European standard, however, were regarded as somehow incredible and inspired utopian narratives about savages and living in paradise. Besides such utopias being substitutes for the real world, an increasing number of heterotopias also entered the stage. In this genre, utopian gardens, museums and even colonies can be counted.

There was a noticeable connection between the interest in ‘savages’ and their uncivilized lifestyles and the rising interest in childhood education as a necessity for a prosperous society. Education was seen as a possible corrective that could bring both ‘savages’ and children out of their immature state and make them civilized. It was a serious attempt to form people to suit themselves to the ‘normal Western standard of

civilized man'. Because of widespread illiteracy and limited possibilities for delivering knowledge widely, an obvious problem was that the Enlightenment discourses actually reached only a minority, so the majority still kept their traditional views of the world. Increased education was, however, an answer to this dilemma, and the desire to manage the world generated many new power networks where the interests in nature, knowledge, and of human beings crisscrossed each other in several ways. The hierarchical ordering of the world, the search for legal systems, the classification of knowledge, and the classification of nature were forms of the same episteme—a shaping of comprehensive order where every little piece would have its position in the whole. Even the increased administrative bureaucracy, the strict etiquette rules that governed social life, and the clock dividing the days are all signs of the same search for world order at an unstable moment; ways of handling immediate chaos and fears of an unpredictable future. Among scholars and writers, the trust in salvation and miracles was gradually diminishing; neither the future nor the past remained stable anymore, although religious speculations and disputes did not by any means disappear all of a sudden. This generated much uncertainty and a search for future visions where reason, the origin of the lost faith, turned into its own, new creed.

While science started to question the canons of the churches, the thrust in technology and science, and the firm organization of the natural world gradually emerged as a new dogma, with similarities to religion and its visions of paradise. In such a situation, it is surprisingly to find that the strong emphasis of European science development might be a brainchild of the Bible, not necessarily the Gospels, but of Genesis and the 'hidden' Apocrypha texts. An interesting finding in this study was the connection between Bacon, Comenius, and the Bible. This correlation harkens back to the discussion in Chapter Two and shows that sacred texts may be very inconsistent; how they are understood is up to the reader and the interpretation. Therefore, they are superb weapons in the mouths and hands of talented rhetoricians. While the natural world was looked upon as the second language of God along with the scriptural, the "divine order" emerged through "the words of nature" and it looks like the transition to a scientific worldview found its strength from religious arguments.

To conclude, the view of nature and knowledge I have presented in this chapter is that, firstly, well before the 18th century an increasing number of observations and experiments were applied in the study of nature, and during the Renaissance nature

and nature gradually attained intense rhetorical power that came to attention in scores of discourses. Rousseau participated in many of these discourses, well aware of the power connected to the word “nature” (see also Lähde, 2008). Secondly, knowledge about nature became a tool that was equivalent to useful political power. Thirdly, in the 18th century many efforts went into discovering the divine world order and on finding classification labels for all natural beings. The natural world was split into parts—a totality built of a huge number of elements, and the task of natural history became to distinguish all these particular elements and to order them hierarchically. This ordering objectified an earlier mythic natural world and made it easier to manage and merchandize things other than nature. Finally this chapter has described processes by which European man became the center of the world and started to regard other ways of life and other kind of thinking as strange and to make efforts to actively reproduce one’s own world order. As one of these European men, but a particularly provocative one, Rousseau occupied various spaces and participated in many kinds of discourses. The mastering of one’s own mind, to make oneself a better and thus more natural person, was an obligation he always stressed, and the next chapter will tell more about this issue.

After this glimpse of Rousseau’s world, where I have tried to put him into a context, the next chapter continues with an in-depth study focused on Rousseau’s nature ethics. The general discussion about the Enlightenment view of nature and Rousseau’s Enlightenment and counter-Enlightenment ideas will be recapitulated in Chapter Seven in comparison to contemporary tendencies.

5 Rousseau on Nature and Ethics

The previous chapter intended to situate Rousseau in his epoch. It also gave a glance at the multiple discourses on the topics of nature and knowledge that transpired both before and during the years of his life. The present chapter concentrates mainly on Rousseau's contributions to these discourses and addresses Rousseau's relationship to nature. He called his thoughts a *system* (e.g., RJJ) and, as already mentioned, in that system "nature" and what is "natural" played a crucial role. With his system he hypothetically tried to construct a vision of a righteous world order consisting of virtuously acting people. In contrast to the way many of Rousseau's contemporaries employed the concepts "nature" and "natural," these words had a strong ethical connotations in his writing. Rousseau focused on both humans' dependence on their fellow beings and how they have to focus on their own role in these relations if they want to change the world to a more decent one. His points are, therefore, still worthwhile reflecting on today. He clearly exposed modern shortcomings and the failure of Western civilization to promote a happier and more perfect life. The aim of this chapter is, therefore, to investigate Rousseau's ethical theory regarding nature as articulated in a number of his main writings.

In this chapter I hope to demonstrate without question that Rousseau's thoughts continue to be relevant to our contemporary ethical discourses on sustainability. The way he criticized the society of his time, on the one hand, shares many features with some current arguments; but, on the other hand, he combined ethics, nature, education, and politics much more powerfully than is common today. With the help of Foucault, I will begin by briefly describing the background of the theme and outline my approach: briefly, because a more thorough background was the topic in Chapter Four and a description of the process plan and how this particular study fits into the book as a whole was given in Chapter Three. Secondly, this chapter presents the Rousseau texts this particular study leans on the most. Thirdly, and as a necessary background, I will explore how Rousseau used the words "nature" and "natural." Without insight as how Rousseau used these concepts, it would be impossible to understand the arguments in this chapter. Fourthly, I will continue with the Foucault inspired examination of Rousseau's thinking about humans' relation to themselves,

their fellow beings, and the society, and then I will move in increasingly wider circles to study how Rousseau looked upon humans in relation to the entire natural world, ending with human devotion to God.

5.1 Background, Procedure and Sources

In the previous chapter, I employed Foucault's genealogy and focused on power. After introducing power as an important element for historical studies, Foucault gradually turned his interest towards ethics. In his later works his basic concern therefore is the ethical *self*¹⁷⁵ and its relation to freedom. Since the study in this chapter will be based on Foucault's approach to ethics and since both Rousseau's and Foucault's views of ethics share many features, I will start by presenting Foucault's view of ethics.

Foucault on Ethics

When Foucault studied power, his central interest was how knowledge circulates and relates to power, and how complex modern power structures incorporate human subjects and their self-relation in subtle but effective ways (Foucault, 1986a). In his view, the crucial questions were no longer Who I am? (as with Descartes; see Chapter Four) or even Who we are in relation to our contemporary time? (as Kant asked 1784 in the famous article *What is Enlightenment?*). Yet, Foucault proposed as another ethical aim: that we have to refuse to be who we are and not accept the kind of individuality that has been forced upon us for ages (ibid.). In the last years of his life, Foucault investigated the relation between the subject, knowledge, and truth in the Hellenistic and Roman societies,¹⁷⁶ and how these relations varied and changed shape during these ages. A common feature in these epochs was that ethics dealt not only with learning rules for how to live, but also included concrete actions that would advance a morally good life. When Foucault used the word *ethics* he referred to the

¹⁷⁵ See Foucault's interpretation of the word *self* in note 23 in chapter 1; see also below.

¹⁷⁶ The Hellenistic Age lasted from the 3^d to the 1st century BC; the Roman Empire lasted from 27 BC to 476 AD. The Stoic school was important around 300 BC and was influential in the Roman Empire before the rise of Christianity, and many Roman philosophers followed Stoic principles, among them Seneca, Epictetus, and the emperor Marcus Aurelius. Plato lived ca. 428-347 BC, and he influenced Plutarch, who lived ca. 46-120 AD.

way people relate to themselves, and ethics is thus the outcome of work one has done upon the self (Simons et al., 2005). With *morality*, on the other hand, he meant a set of values and rules that some authority requires, and when these were prescribed more or less openly by agencies such as families, educational institutions, churches, and so forth, he talked about *moral codes*¹⁷⁷ (Foucault, 1985). Foucault (2005) interpreted the word *self* according to how Plato used it (e.g., in the dialogues *Alcibiades* and the *Republic*) as entailing an element of bodily, instrumental, and linguistic actions concerning the ways the soul uses the body, diverse tools, and language. The way the soul becomes a subject of actions relates to the Greek *khēsthai*: that concept entails many relationships one can have with one's self, but also with something else or with other persons. So this relation can be an attitude, honoring, worshipping, and so on. To take care of one's self is to take care of one's soul as a subject and, in the relations of a subject to diverse things, to take care of the form of the soul.

Ethics aimed at the implementation of rules and was thus a reflective way of practicing freedom. It was not only about knowing the self, but also prioritizing the 'care of the self' before everything else and taking control of the self, instead of being a slave to one's desires. In the end of the Hellenic era, this self-management developed into a lifelong duty for all free men—their whole existence was thus an ongoing training (Foucault, 2005). Initially, caring for the self was actually the premiere focus, of which knowing the self was a major part. Since ethics and politics were seen as connected, the person who wanted to work with politics had to start by working with the self. In Plato's dialogue, *Alcibiades* care of the self was regarded as a necessary political act.

It was a matter of elaborating an ethics that enabled one to constitute oneself as an ethical subject with respect to these social, civic, and political activities, in the different forms they might take at whatever distance one remained from them. (Foucault, 1986b, p. 94)

In Greco-Roman texts, many authors described various forms of caring for the self (Foucault, 2005). These forms could refer to cognition, movements of existence, activities, and attitudes. The vocabulary of diverse practices such as medicine and religion inspired the expression of these overlapping exercises. So, caring for the self

¹⁷⁷ The 'hidden curriculum' is an unspoken moral code (in Freire's vocabulary "the culture of silence") in this respect.

could include *paying attention* to one's self; that is, a search for answers to the question What is my self? thus distinguishing one's self from other things. This relates to *turning around towards* the self that is like going into a house, leaving the outside behind, and focusing on what happens inside (of one's self). Care of the self could also be the act of *examining* the self; a moral task of actively remembering one's moral duties (e.g., a daily ritual reminder of one's responsibilities and how to make improvements according to them). In his lectures on the course *The Hermeneutics of the Subject*, Foucault compared *collecting one's self* with building a fortress around one's self; a kind of active protection against bad influence. *Treating* or *curing* one's self could be described as becoming one's own 'soul doctor' by performing the treatments that are needed; for example, 'amputating' bad habits. *Freeing* or *emancipating* one's self entails that one has to detach the self from enslavement, and *honoring* and *holding oneself sacred* involve showing one's self appropriate respect and feeling shame when needed. The most ideal form of care of the self is being one's own master and thus being happy with one's self; it is simply being fully satisfied with one's self and enjoying one's own existence. In *Alcibiades*, Plato noted the care of the self as an important occupation for the young, but the Epicureans and the Stoics claimed that it was a lifelong activity (ibid.). They argued that the young need to prepare themselves for adulthood and the elderly need to learn how to stay young (maintain a young mind). The care of the self was about correcting and becoming again what one should have been but never became, because the first errors were already served with the nurse-maid's milk. Therefore, the care of the self must reverse the values fostered in the family.

According to Foucault (2005), modernism brought with it individualization; the social bonds disappeared and the emphasis on 'knowing oneself' was separated from 'care of the self'. It became more important to learn to *know* the world and love one's self than to *care* for the self in order to better care for others and the world. Knowledge alone became the credo, the immediate access to the truth requiring no altered position in the form of self-transformation. A philosophy that includes *spirituality* means that truth is not directly given to subjects in the form of mere knowledge (*connaissance*), but that subjects must transform themselves in order to gain access to the truth (ibid.). Foucault distinguished between *connaissance* (knowledge about facts, objective knowledge, to be informed) and *savoir* (philosophical or spiritual knowledge, reflective knowledge, judgment) (e.g., Foucault, 2000b, 2005). *Savoir* involves the subject as a creator of forms of knowing

that do not rely merely on theoretical texts and empirical findings but that depend, instead, on various practices and institutions. Self-transformation, therefore, involves understanding complex relations and causality that may even have historical explanations (Foucault, 1997a). *Savoir* is something more than science, or even learning; it is, among other things, about how to live (Lyotard, 1979). When the focus on *connaissance* is complemented with the search for *savoir* the knowing subject is created. Philosophy became disconnected from spirituality somewhere in the emergence of modernity, but this break, strongly promoted by Descartes, was not a sudden one (Davidson, 1986; Foucault, 2005). An epistemological break between factual knowledge and ethics was accentuated when science started to free itself from ethical considerations. Rousseau opposed this development. As mentioned in the Introduction, ‘care of the self’ does not mean egoism, but comprises a self-cultivation that includes caring for ‘the other’; it is autonomy combined with ethical obligations (Foucault, 1985). An ethics that cares for others cannot neglect other positions nor can it neglect the foundation of life: the earth.

‘Care of the self’ is, firstly, a complexity that can be described as an *attitude* towards the self, other people, and the whole world. Secondly, it is a kind of *attention towards the self*, a consideration of the person’s own thinking and being. Thirdly, it is “a number of actions exercised on the self by the self, actions by which one takes responsibility for one’s self and by which one changes, purifies, transforms, and transfigures oneself” (Foucault, 2005, p. 11). It is not a question of a marginal phenomenon: ‘care of the self’ has been a basic idea in the history of practices performed by subjects towards themselves and a foundation for all rationally conducted morality in Ancient Greek, Hellenistic, and Roman philosophy, and in Christian spirituality (Foucault, 2005). Thus, ‘care of the self’ is a positive self-training aimed at learning to hold back one’s own egoistic desires for the benefit of other people, a kind of altruistic self-exercise. Foucault did not hold ‘care of the self’ connected to universal laws and morals built on merely reason, as was the case with Kant’s categorical imperatives. Instead, he stresses the development of the personality as a process of transgression where the subject learns to distinguish its own free choices from choices influenced by other persons in order to avoid the kind of normalization that uncritically follows the mainstream. Through his ethical approaches Foucault addressed the relationship of individuals to themselves and divided these studies into four major aspects: (1) ethical substance that is the relevant domain for ethical judgments; (2) the mode of subjection, or the way people are

invited/incited to recognize their moral obligations; (3) self-forming activity; and finally, (4) the *telos*,¹⁷⁸ or the goal towards which self-formatting activity is directed.

Rousseau, like Foucault, was influenced by Plato, Plutarch, and the Stoics, and he also stressed the ‘care of the self’, although he did not use that concept. He spoke, instead, about ‘knowing oneself’ and emphasized activities prescribed by this tradition. While many modern scholars emphasize that knowledge alone gives access to the truth (Foucault, 2005), Rousseau regarded the truth as a result of work on the self, a process of self-transformation. He asked for concrete changes, and criticized scholars or philosophers who only used their knowledge as personal adornment. According to Rousseau, humans are born with a primitive kind of self-love¹⁷⁹ which can subsequently be modified by alien forces and thus become harmful. Humans, therefore, have to monitor how this self-preserving, innate love develops. “Since each man is specially entrusted with his own preservation, the first and most important of his cares is and ought to be to watch over it constantly. And how could he watch over it if he did not take the greatest interest in it?” Rousseau asks (E, p. 213). Foucault described many forms of ‘care of the self’, but there are interesting common elements in the self-focused practices of Rousseau’s and Foucault’s ethics, and their common roots make it reasonable to follow Foucault when studying Rousseau’s ethics.

In what follows I will explain how I have pursued my study of Rousseau’s ethics and how he wanted to promote not only a better understanding of the essential human being, but also of what the self of a civilized human being is, thus awakening interest in a more ‘natural’ conduct. Rousseau describes two distinct ways: one is self-training, the other training of others, or education. I will examine the first one in this chapter and the second in the next chapter. Rousseau’s view of ethics has so many similarities with Foucault’s that I will therefore use Foucault’s interpretation of the concepts of ethics in my study of Rousseau (see above).

Problematisation

The research approach in this chapter is a strategic modification of Foucault’s ethical study outline as described in *The History of Sexuality, Part Two*, but also in *Hermeneutics of the Subject*, a book based on Foucault’s lectures at the *Collège de*

¹⁷⁸ The Greek word *telos* means *end*. *Teleology* entails goal-directed activity.

¹⁷⁹ This self-love that Rousseau called *L’amour de soi-même* or *amour-de-soi* I will describe in more detail later in this chapter.

France in 1981-1982. While Foucault focused his research mainly on instructional texts and practices concerning moral conduct, I will, on one hand, study Rousseau's theoretical discussions about how humans ought to act and, on the other hand, briefly relate how he managed to live in accordance with these prescriptions in his own life. In Chapter Three I have already described how I will employ Foucault's ethical research strategy in what follows, but I will give a short summary at this point to refresh the reader's memory. While Chapter Four answered the first research question (I) of the three questions in Part Two, the problem I will now embark upon is to answer question II (see also Chapter Three, and Table 2): What were Rousseau's ethics in relation to nature? This is the main question in this chapter and the investigation is divided into four sub-questions representing four problematized areas:

1. *What is the ethical substance of Rousseau's conclusions about the moral conduct of human beings?* This question asks about prohibitions and regulations against the self; in other words, the way individuals need to actively train and shape their own being and their moral conduct. Self-control can be a constant internal struggle, but it can also be a constructive development: for example, developing affection for or devotion towards nature and what is natural. Foucault calls this point of the analysis "ontology": a study of existence, of the way of being as a special standpoint, and in this case a particular position towards what Rousseau regarded as natural.

2. *What modes of control (subjection) do humans have to undergo to live in tune with their human nature, according to Rousseau?* Diverse forces in the society affect and regulate human life and, according to Foucault, humans define their position in relation to the rules (principles) they have chosen to follow in their various individual and social roles. This question thus asks how individuals ought to relate to more or less openly expressed social rules or divine laws and how they ought to define a style or a way of conduct in relation to these rules or laws. Such rules stipulate how people have to look upon themselves and attend to their own thoughts. Did Rousseau mean that they had to choose to conduct themselves in accordance with what is 'natural' in order to become models for others, or just because they needed to look for beauty and perfection in their own life, or because they needed to target some other and even more profound aims? Foucault calls this point "deontology."

3. *What forms of conduct or manners do individuals have to choose in order to transform themselves into more 'natural' humans, according to Rousseau?* This question deals with humans' self-formation activity towards becoming more naturally humans. Do they need to strive to memorize, control, and learn rules regulating their own behavior, or do they need to go through constant battles combating their desires with the help of ongoing self-examinations? Or can they just suddenly decide to live in a certain way? In what terms did Rousseau describe the actions, the techniques by which individuals have to transform themselves in accordance with what is natural? The different processes of self-formation in which human beings can choose how to conduct their actions are what Foucault calls "ascetics."

4. *What should the ethical goal be towards which individuals should strive in actualizing their moral selves, according to Rousseau?* This question deals with Rousseau's view of how individuals' active transformation of their selves (their self-creation) into ethical subjects should strive towards special aims. The goal of this striving, which Foucault calls "teleology," can, for example, be freedom, insensibility against passions, and salvation or eternal peace.

I will tackle these four aspects across four areas of concern: (1) how persons relate to their own selves and to other persons, (2) to society, (3) to the natural world, and finally (4) to the Cosmos and the Divine (see Table 2).

Choice of Material

This ethical analysis is based mainly on a few writings that I find fundamental for understanding Rousseau's ethical perspectives of nature. I will start with Rousseau's two essays, *A Discourse on the Arts and Sciences* (1st D) and *A Discourse on the Origin and Basis of Inequality among Men* (2nd D), including the detailed notes of the latter discourse. In these discourses Rousseau basically investigates the topics "state of nature" and "human nature" in comparison to "civilization." Secondly, I will use *The Social Contract* (SC), his great political classic. Thirdly, I lean on the late autobiographies, *Rousseau, Judge of Jean-Jacques: Dialogues* (RJJ) and *Reveries of a Solitary Walker* (RSW). The last main source of literature used is the *Émile* and especially the section *Professions of Faith of the Savoyard Vicar* (E), a text that reveals Rousseau's view of nature in relation to the Divine. (Since *Émile* is the main source in the next chapter, I will discuss the entire book there.) I have also used some

other of Rousseau's books to supplement and support the above sources when I have found it crucial. Finally, I have tried to compare my interpretations with those of other scholars' concerning sensitive or controversial matters.

Two Discourses

Rousseau's *1st Discourse* is a work that won the first prize in an essay competition arranged by the Academy of Dijon in 1750. In the author's own opinion, it is a warm and strong work that, however, lacks order and logic (C). Three years later, Rousseau participated in a new competition arranged by the same academy, this time without winning any reward. Despite that failure, the *2nd Discourse* is still significantly alive more than 250 years later. This very powerful essay was published 1755 and has in fact been much more read and commented on than the first one. In the short *1st Discourse* Rousseau contests the whole Enlightenment mentality of a strong belief in progress that fails to reflect on the consequences of such 'progresses'. The tone is caustic and the personal commitment is clearly evident. Regardless of its size, this initial work is nevertheless an opening—the first rudimentary idea of Rousseau's whole philosophical enterprise.¹⁸⁰ While the first part of the essay is a critique of contemporary society and its strong trust in science and arts, and his critical arguments are based on an empirical foundation using examples from diverse countries, the second part analytically considers both the roots and consequences of civilization and gives a small hint of what the first state of nature might have been like.

Rousseau developed this brief image of the "state of nature" from the *1st Discourse* into a much more detailed account in the first part of the *2nd Discourse* and presented a genealogy of the whole chronology from the state of nature to a civilized society in Part Two. A problem Rousseau seems to have faced is that he wanted to both depict the state of nature as a constant status quo, in the form of a utopian thought experiment, and historically as a phase that ended and was replaced with a new era. So the tricky thing was, on the one hand, to tell a story about two paramount opposites: an account of good humans as a utopian vision that contrasted with crass reality and, on the other hand, to present a fictive historical developmental line with empirical evidence about how humans had damaged the blessed peacefulness of the state of nature and thus had brutally changed their own living conditions. Because

¹⁸⁰ Rousseau had published poems and discussions of music before publishing the *1st Discourse*.

“nature” has such a profound relevance in the 2nd *Discourse*, it is of a great importance for this book and fundamental to understanding Rousseau’s subsequent works.

The thoughts offered in the 2nd *Discourse* are both spontaneous and complex and their interpretation has long been disputed.¹⁸¹ In the beginning Rousseau states his intention to write an ageless and placeless story. However, the story is strongly connected to its own context and the concerns of that age, but read on another level it still has a great relevance today. It is, however, a thorny task to recapture this multifaceted work. Lähde (2008, p. 45) calls Part One of the discourse a “radical exercise in abstraction” and Rousseau calls it *hypothetical*. I find it appropriate to read Part Two as a hypothetical historical story, as well (see also Broome, 1963; Bernstein, 1990), but understood as an allegory revealing perceptions of human psychology (see Scott, 1992/2006). My intention is to read the 2nd *Discourse* as a multipurpose blend of thought experiments (see Muthu, 2003) and utopias (see Kateb, 1967, 2005/2006) that are verified by Rousseau’s knowledge gained through ethnographies. In my opinion, Rousseau mainly intended to radically critique the lifestyle of his day and to argue that more knowledge and ‘enlightenment’ had not led to a more decent society.

In Broome’s (1963) opinion, Part One of the 2nd *Discourse* is simply a satirical alternative to the first chapters in Genesis and a rationalization of Paradise lost, and he frankly suggests that we read the 2nd *Discourse* ignoring the possibility of systematic unity but, instead, to regard it as a sequel to Rousseau’s 1st *Discourse*. Despite the distinctive styles, I also underscore this suggestion, while I find the underlying purposes of both documents to be similar, despite a remarkable difference in rhetorical style and complexity. The two discourses have also direct connections to *Émile*. The three writings are inseparable and form a whole, according to Rousseau (LM). However, Bellah (2002) reads the two discourses in parallel with the *Social contract* as a complex story that is greatly beneficial for understanding the modern world. I think this is a profound argument and the same advice applies to most of Rousseau’s writings, as they often deal with the same philosophical questions. Rousseau himself (e.g., RJJ) declared that he dealt with the same principles in all his works. He did not split ethics from politics or education; in his view, they are all strongly interconnected (e.g., E). “Those who want to treat politics and morals

¹⁸¹ See, e.g., Lähde, 2008, for more about this dispute.

separately will never understand anything of either of the two,” he said (E, p. 235). Consequently, I have decided to interpret the two discourses together, following Broome’s (1963) suggestion, as two varied ways of advancing the same basic idea, and to compare them with his other writings, especially the *Social Contract*, following Bellah’s (2002) advice, but also in connection with Rousseau’s *Dialogues*, *Reveries*, and *Savoyard Vicar*. In my interpretation I will use the five level tool that I described in Chapter Three (a physical, a mental, a theoretical, an allegorical, and a metaphysical level).

Social Contract

The *Social Contract* is a work that is a ‘must’ reading for all students of political theory. Yet, it is curious that it can be interpreted and made use of in so many diametrically different ways. Democrats, totalitarians, anarchists, communists, and other diverse phalanxes have all found something applicable in its thesis. This can be due to a certain lack of clarity in Rousseau’s expressions; but the cause can also be an inexact reading and a projection of particular ideological purposes into the text, or that some contrary truths are dismissed (see Gay, 1987). Rousseau purposefully challenged his readers to think (see E), and did probably not realize how effectively he created confusion. Shklar (1966/2006) remarks that the *Social Contract* never was meant to be a concrete plan for a better future, but was more of a standard for judging contemporary society. “It was a yardstick, not a program” (ibid., p. 231). Whether a book is meant as a program or an experimental yardstick clearly makes an effective difference; in the latter case, the proposals are not to be taken as concrete plans for progress, but only as seeds for reflection. The *Social Contract* deals a great deal with governments and describes various forms of ruling systems and legislative bodies appropriate for different conditions. I will not enter that discussion but concentrate, instead, on the philosophical ideas.

Two Autobiographies

At the beginning of 1770s, Rousseau wrote the very special autobiography *Rousseau, Judge on Jean-Jacques: Dialogues*. In this book he discusses the kinds of struggles the readers of his books have to face and the risk of prejudicially judging something according to what others say rather than basing judgments on one’s own reading or investigation. Another type of misjudgment he addresses is judging on superficial

appearances rather than on gaining deep knowledge. The book consists of three conversations between the two characters, *Rousseau* and the *Frenchman*, who discuss a third character called *Jean-Jacques*. Foucault (1998b, p. 43) describes the form of the book as a “third-degree language” that has to overcome “three forms of silence.” The discussion between the three voices focuses on Jean-Jacques’ person and his literary production, and on the content of his writing. The story begins when the character called ‘Rousseau’ (representing the second level language) has arrived in France from a long stay abroad. ‘Rousseau’ had read all the books written by the author Jean-Jacques, while the Frenchman (third level) has not read any of them and has only heard all the scandal mongering about Jean-Jacques (first level, but mute). The author of the *Dialogues*, the real Rousseau, expresses his thoughts through the book’s character ‘Rousseau’; thus he is partly ‘Rousseau’ and partly the object of the discussion, Jean-Jacques. These inter-mingled characters show that the narrative is built on a technique called *author’s surrogate*,¹⁸² which simply means that the author is also a character in the story and in this particular story his person is even split into two characters. Even the reader’s role is tone of both defender and accuser (see also Kelly & Masters, 1990). This exceptional construction and Rousseau’s mental state at the moment of the writing have inspired researchers to study the book from a psychological perspective.

The Reveries of the Solitary Walker is Rousseau’s last incomplete publication, a small and tranquil novel-like book with ten short chapters, ‘promenades’, narrating Rousseau’s latter-day life and thoughts, and the foreground for the whole story is his natural surroundings. On the one hand, Rousseau describes a human being, himself, living peaceful, easy days in the countryside. On the other hand, the solitude is all but uncomplicated. Being cut off from society life has a grave tone of melancholy, and a basic theme is the power struggle between solitude and society. According to Rousseau, it is only God who can be happy alone (E). Rousseau’s secluded self was not a pleasant solution; it led him to isolation and destruction. The book has also become very popular outside philosophical circles because its imaginative and sensitive writing style influenced both the romantic and symbolist movements in literature (Broome, 1963). Students of Rousseau’s political thoughts mostly reject his autobiographical writings and few scholars have treated them systematically (ibid.);

¹⁸² Author’s surrogate is a technique employed both in novels and philosophy. David Hume used the same method in his posthumously (1779) published *Dialogues concerning natural religion*. He also elaborated with three speakers.

for that reason, neither the *Dialogues* nor the *Reveries* are cited in a political context as often as the two discourses I have employed, but these two autobiographies are relevant to my research. I would like to identify the *Dialogues* as a kind of testament to Rousseau's ethical writings and it has much common with Plato's *Apology* (see also Kelly & Masters, 1990). The *Reveries* is also a testament where Rousseau most intensely expresses his love of the natural world.

Savoyard Vicar

The last of the main writings I have used in this ethical study is the section of *Émile* called *Savoyard Vicar*. It belongs to the most controversial of all Rousseau's writings. Researchers have expressed conflicting opinions about the relation between the vicar and Rousseau and whether or not the vicar's statements actually are Rousseau's (see Scott, 1992/2006). On his early wanderings, Rousseau met two priests named abbé M. Gaime and abbé M. Gâtier. In his *Confessions*, he says that they were models for the vicar, but I regard the religious views of the vicar to be Rousseau's own (see also Broome, 1963) and suggest that Rousseau and the vicar are primarily the same person and that Rousseau has used the author's surrogate technique in this book sector as he did in *Dialogues*, maybe to protect him from the authorities (if so, it did not protect him enough). Salkever (1977-8/2006) is among those who do not agree that Rousseau expresses his own ideas through the vicar, but the value Rousseau himself put on this text support the conclusion that the thoughts expressed are his own (see RSW). The text can be divided into two parts, the first part presents central elements of Rousseau's natural religion, and the second is a strong criticism of dogmatic religions and a plea for religious freedom.¹⁸³ I will mainly employ the first part in this study.

Savoyard Vicar was regarded as a dangerous text, and it led to *Émile* being prohibited by the Catholic Church. The text presents a natural religion that in many ways totally contradicts what is holy in the state religion at a time when the Church struggled to keep its position. I will deal below with why the reaction to the book was so sharp. This is also a text that researchers have often neglected, but it is relevant for my study. Similar to *Confessions*, this text is one where Rousseau searches for 'human nature' and the truth from a more personal angle than in the 2nd *Discourse*.

¹⁸³ The second part is not of great relevance in this study, but I recommend reading it because of all the thought provoking and caustic arguments against dogma and religious worship that takes the form of hairsplitting instead of actions. These arguments still sound very current today.

He explicitly searches for the truth from within. Before the vicar starts his story he says: “You shall see me, if not as I am, at least as I see myself”¹⁸⁴ (E, p. 266).

5.2 *State of Nature and Human Nature*

A crucial aim of many of Rousseau’s writings was to identify and explain *human nature*; that is, to describe humans’ original state, the human character unaffected by society. To find this ‘human nature’ Rousseau also aimed at exposing the *state of nature* in its most initial and *pure* state, although he did not in fact clearly distinguish between ‘state of nature’ and ‘pure state of nature’. The ‘human nature’ topic that he first addressed in his *1st Discourse* was to become a basic undertaking in his *2nd Discourse*. Rousseau also brings this issue into consideration in a lesser degree in other books, although, as already stated, most of his writings are more or less clearly connected. It was not unique for him to discuss the ‘state of nature’ because the concept had already provoked both philosophical and theological interest before Rousseau wrote his *1st Discourse*.

As already mentioned, Rousseau was familiar with literature of voyagers who portrayed native people from the colonies (see, e.g., Muthu, 2003). However, while he did not think these people lived in a pure state of nature, he clearly admitted that the stories enriched his thinking (e.g., Note VI in *2nd Discourse*). Thus, with this knowledge about ‘savages’ and hypothetically reflecting on how humans would act in a state of nature, Rousseau worked out his theory. He wanted to show how humans differ from other animals and what would be typical for a non-civilized human being, thus portraying human nature as uninfluenced by civilization. Rousseau made up the story in a way that involved all the social and cultural influences that might have changed human character (Muthu, 2003).

By ingeniously stepping back in time, he used his imagination and tried to draw a picture of a state of living that was completely the opposite of the society in which he lived and that he disliked so much—modern Europe’s metropolises, especially Paris (see also Lähde, 2008). His undertaking was to describe human beings as undamaged by civilization, a situation that he neither thought existed then nor had existed anywhere at any other time. So, by drawing a picture of the antithesis to his current situation, he might have aimed at shaking up and maybe even generating a synthesis,

¹⁸⁴ “Vous me verrez, sinon tel que je suis, au moins tel que je me vois moi-même” (OC, IV, p. 565).

a social model that might be implementable in practice. Basic to this world order are humans who are more natural, who to a greater extent act in accordance with their innate faculties. He also searched for more natural human relations, natural societies, and natural connections to God.

It is quite obvious that the way Rousseau describes the ‘state of nature’ is also greatly inspired by Plato’s *Statesman*. In this dialogue, Plato describes the first human living conditions as rather similar to Rousseau’s picturing of the state of nature. In Plato’s myth, the initial human state had no wars and no conflicts.¹⁸⁵ On the question of whether humans are naturally good or evil, Rousseau first states that, initially, humans are neither good nor evil, as they have no knowledge and no depravity. However, in a note he declares that humans are naturally good: “Men are wicked, a sad and constant experience makes proof unnecessary; yet man is naturally good, I believe I have proved it...”¹⁸⁶ (2nd D, Note IX, p. 197; see also RJJ and Chapter Four in this book).

In a natural state, humans live in the present and care about what takes place in their immediate neighborhood. In comparison to the reflections of civilized people, they do not care about the whole world (2nd D). The first and pure state of nature is prior to all purposeful social and moral relations between human beings. In that state humans lack no more than basic needs (e.g., hunger, sexual desire) and have neither moral needs nor conscious regard for their fellow beings. In the state of nature, humans are free but only in a natural sense, compared to reasoning and moral humans who are free to make moral choices (see also Scott, 1992/2006). When Rousseau says: “To will, and not to will, to desire and to fear, must be the first, and almost the only operations of his soul, till new circumstances occasion new developments of his faculties” (DPE, p. 88), he talks about freedom to choose food, shelter, and the like.

Rousseau criticized other writers for having rejected the study of the state of nature; studies that could have revealed the foundations of human society and made the discussions about natural rights less complicated (2nd D). In the two mentioned discourses, he hypothetically describes an ideal situation that might have existed before human beings became corrupted by society, and he is well aware of the paradoxical human position he portrays and in which he is personally situated. On the one hand, humans have left living in paradise and have become enlightened through

¹⁸⁵ This was the Golden Age when Cronus (one of the 12 Titans, children of Uranus and Gaea also called ‘Mother Earth’) ruled over the universe.

¹⁸⁶ “... l’homme est naturellement bon...” (OV III, p. 202).

education Thus they are capable of reflecting on and writing about this lost heaven. But there is no key that unlocks this forever hidden knowledge, and there is so much they still do not understand.¹⁸⁷ This ascension to a higher consciousness, on the other hand, brought humans into a situation where they hardly could know themselves and their own inner life anymore. In this situation it was difficult for them to investigate human nature by studying what was easily at hand, namely themselves. Rousseau was nonetheless convinced that he was capable of such insights, in contrast to others who looked at the state of nature from their own standpoint—that is, from a civilized view—and therefore ended up with false conclusions (see 1st D).

Genealogy of Human Being

Rousseau claimed that he was the only one who managed to step aside from his own reality, and he describes how a gap between the natural human being and the culturally deprived human being developed. In order to provide an overview of the whole story, I have compressed the dreamlike landscape description in Rousseau's *1st Discourse* into a short narrative in my own words. The dramatic ending originates with the *2nd Discourse*.¹⁸⁸

Once upon a time there was a beautiful coast, where nature flourished. In that place natural human beings resided. They were innocent, poor, and undamaged. All of them were equal and lived alone in similar lodges. The gods¹⁸⁹ kept an eye on their undertakings and they lived a happy life. With primitive passions they focused on themselves, aiming mainly at self-protection. Their love of self¹⁹⁰ was a good and absolute feeling by help of which the souls of the inhabitants maintained their original natural characters. Overall, it was an absolutely wonderful nature paradise in which to live.

But one day, their love of themselves became contaminated by errors and prejudices and was deflected by thousands of obstacles and it was thus misled. They took the gods and put them in temples. Still later, humans

¹⁸⁷ We still lack relevant answers for many of the questions Rousseau struggled with, despite advanced archeological and paleontological research techniques.

¹⁸⁸ The story is a distillation in my words.

¹⁸⁹ "At first men had no kings save the gods, and no government save theocracy... It takes a long time for feeling so to change that men can make up their minds to take their equals as masters, in the hope that they will profit by doing so" (SC, p. 61).

¹⁹⁰ 'Love of self' means here amour-de-soi that I will soon describe.

drove away the gods and moved into the temples themselves or in residences like temples. This was the peak of vice, when the arts and sciences started to develop, and it meant a catastrophe for the humans' willingness to fight for their own territories, to cultivate the land, and to combat their own morality. The conveniences of a life of luxury made humans lazy. In that situation the humans developed education, but it failed to promote responsibility. And although they learned to formulate difficult sentences, they did not manage to recognize the truth from its opposite, as already at an early age they had to learn all kinds of unnecessary things instead of their most important duties. And when humans then developed the art of printing they started to duplicate the most stupid thoughts.

The most problematic was not humans' increased evilness, but their lost confidence, their forthrightness had vanished. The human outer image had become incongruent with the inner; the inner selves were hidden behind a common façade as modern society required more and more conformity. Gradually it looked like every individual was cast in the same mould. Friendship, real esteem, and trust were replaced by jealousy, suspicion, fear, and falsity, even if all such callousness was hidden under an untrustworthy politeness. It became an art to skillfully show disregard for others and one's own brilliance appeared through the disparaging of others. Due to this human rivalry the improvement of the arts and science correspondingly depraved their morals and this was reflected in human conduct. Finally, all of civilized life was ruined. *And so the story ends.*

The thought experiment of the life in the once so beautiful paradise thus ends very sadly. This sad conclusion shows Rousseau's judgment about the state of the 18th century (but it could as well be our own time). The story that resembles the tale of the Fall, has its own merits and a strongly moral and ironic message. Rousseau claims that the history yields similar pictures from many parts of the world with very few exceptions. Egypt, China, Greece, Rome and Constantinople have all witnessed how the development of either the sciences or the arts (or both) has corrupted people (1st D). "If the Sciences purified morals, if they thought men to shed their blood for the Fatherland, if they animated courage; the peoples of China should be wise, free, and invincible" (ibid., p. 10). In this respect, Rousseau saw Sparta as an ideal in contrast to the corrupted Athens. Athens condemned Socrates to die, he who knew that the greatest knowledge was to know that he knew nothing. Socrates would probably have met the same disrespect in the 18th century France, but instead of being poisoned he would have been scorned (like Rousseau), according to Rousseau (1st D).

First Revolution

In the state of nature, Rousseau described, human beings had to develop the talents they needed for survival (2nd D). They became strong, because only the strongest had a chance of surviving; they learned to use weapons they found in nature, such as stones and twigs, and to struggle for food with other animals including their species fellows. While some humans became bold and others anxious, some fast and other slow, some big and other small, these physical inequalities made them compare themselves with other animals and to regard themselves superior to them. And when people found that other humans behaved similarly, they started to imitate each other by adapting certain manners and following those rules of conduct that seemed most beneficial. Thus mimesis (imitation) was born. Lähde (2008) announces the paradox of physically unequal humans living a naturally equal life, but I think Rousseau was well aware of this problem: it set competition into motion. Imitation is natural for humans, but in society it turns into vice (E).

This chain of enlightenment led to what Rousseau calls *the first revolution*, when humans established families, built their first lodgings, and introduced property. In the 2nd *Discourse* he rather vaguely suggests that a revolution was initiated by some external event, some kind of natural catastrophe or the like that jeopardized the solitary life and thus led humans to join in groups.

I suppose men to have reached the point at which the obstacles in the way of their preservation in the state of nature show their power of resistance to be greater than the resources at the disposal of each individual for his maintenance in that state. That primitive condition can then subsist no longer; and the human race would perish unless it changed its manner of existence. (SC, p. 8)

A consequence of this revolution was the birth of sentiments like love and the division into male and female temperaments and occupations. Rousseau, however, does not explain how women gave up their hitherto equal position and became oppressed by men (see Okin, 1979/2006). Did this take place voluntarily? How did patriarchal society arise? Rousseau has no answers to these questions. Humans started to compare and compete with each other and destroyed their innocent happiness. It became important to strive for recognition, and wrongdoing and lack of recognition caused revenge and conflict. Despite such quarrels, Rousseau's regard for this stage is somewhat contradictory: it is the most excellent, a golden age, or, in contrast, a synthesis between the pure state of nature and civilization. There was still

no great economic imbalance and, at least initially, this stage was a pleasant time. But a distinct competition between people and groups started to emerge due to their different dispositions and values, though this tension did not yet manifest all the disadvantages of the next stage (see Muthu, 2003).

Second Revolution

Inequality rose when one individual started to collect more property than others and, thus, the need for labor was created (2nd D). This brought about *the second revolution*, when humans invented metallurgy and agriculture. Rousseau explains how, after the second revolution, “natural or physical inequalities” led to “moral or political inequality” that depended on ownership. Because it became important to be recognized as outstanding in aspects like beauty, strength, and intelligence, humans without such superior qualities had to pretend they possessed outstanding features. Therefore, reality and appearance diverged, and ownership became a new way of showing one’s superiority. The only way to enlarge one’s own property was on behalf of somebody else’s, and this paved the way for still more competition and rivalry where wealth was distinguished from poverty and mastery from slavery. When much of the earth was occupied with societies in this stage, wars occurred as nations and societies in different stages struggled in bloody battles.

Rousseau disagreed with Hobbes that some are born rulers and others are born to obey (SC). Everybody is born equal in Rousseau’s social theory. Political society was born in a common agreement, a social contract, where both the chosen rulers and the people agree to follow the laws they have jointly created, laws that bind their union. Likewise, those chosen to be magistrates put the common interest before their own personal wishes. Due to differences between individuals and their social interactions, different models of government were established. Those most unequal and far from the state of nature created monarchies; if some members were superior to the others, they chose aristocracy; and the most equal and natural built on principles of democracy. In this stage the people preferred to give up their freedom for strong rulers and equality thus decreased. Rousseau (2nd D) noted that those authors who believe that human nature is *evil* regard this stage in the development of humankind as the initial stage and dismiss the previous state of nature.

Rousseau depicted the decrease in equality in three stages (2nd D). Firstly, the establishment of the laws and the right of property; secondly, the institution of

magistracy; and thirdly, the conversion of legitimate into arbitrary power. The first epochal change caused the split into rich and poor people, the second into powerful and weak, and the third into master and slave. Being last, the third stage can be changed only by a new revolution. At best, a third revolution could change the course of the development of mankind to a more decent one—to a society built on a social contract derived from the general will, not the particular wills of all.¹⁹¹ But, Rousseau did not believe that this social form could ever come to be. It would require that all society members should be able to manage their selfishness and agree on the common good. Subsequently, Rousseau depicted a cyclical history of altering birth and destruction that is reminiscent of Ancient Greek philosophy, Hinduism and Native American religions, and which is unusual among Western cultures that usually consider history as linear. Rousseau's picture of, on the one hand, the perfect human state (the state of nature), and on the other hand, a perfect social state (the golden age) are more hypothetical visions than real aims. Sustainable development could perhaps be compared with Rousseau's dream of a perfect society, and the prophecy of nature's collapse the antithesis. Seen as an imaginary vision, sustainability is a far-reaching aspiration for the good life that can be modified along the route.

Natural contra Civilized

In Rousseau's dichotomous story, the savages occupy a middle position.¹⁹² While he still found the Europeans to be the most civilized people in the world, he might have failed to spot advanced civilizations in many other regions of the world.¹⁹³ However, Rousseau was aware of this ignorance and addresses the need for more knowledge about people from other regions than Europe. He is actually ironic about viewing Europe as the center of the world and recommends studying foreign peoples instead of the scholar's eagerness for examining only foreign plants and stones. Rousseau was aware that, however they look, all humans share many similarities that are universal for all humankind, but he did not know about the distinction between apes

¹⁹¹ I will deal with the topic of the social contract and general will later in this chapter.

¹⁹² The savages of America had not yet reached the second revolution stage, according to Rousseau. (2nd D) It is obvious that he was not well-informed about the farming Indians in Northern America or that the South American Inca Empire was a highly developed society, but lacking a written language.

¹⁹³ He probably did not know much about particular areas of Northern Africa, such as Egypt, and regions in Asia, for example, and China (although he mentions China as an example in the *1st Discourse*), Japan, Arabia and the Fertile Crescent.

and humans.¹⁹⁴ While Rousseau attributed spoken language to social variables, he found the animal language of gestures superior to the spoken as a means of rapidly expressing feelings and thoughts. And he was convinced that savages could never learn to prefer civilized life over their solitary life in the forest, and would remain unworried about needing improvements. Why should they favor a life where everybody struggles only for living a comfortable life and being admired by others?¹⁹⁵

Human history did not stop in Rousseau's "Golden age." Fascinated by ambition, humans started to admire power and thus risk their freedom (2nd D). However, this ambition began when humans first began to compare physical inequalities. Other inequalities, such as nobility, power, and wealth, are all consequences of natural inequalities. In two long sentences Rousseau expresses his fury against such inequalities in society.

I would show how much this universal desire for reputation, honors, and preferment which consumes us all exercises and compares talents and strengths, how much it excites and multiplies the passions and, in making all men competitors, rivals, or rather enemies, how many reverses, how many successes, how many catastrophes of every kind it daily causes by leading so many Contenders to enter the same lists: I would show that it is this ardor to be talked about, to this frenzy to achieve distinction which almost always keeps us outside ourselves, that we owe what is best and what is worst among men, our virtues and our vices, our Sciences and our errors, our Conquerors and our Philosophers, that is to say a multitude of bad things for a small number of good things. (2nd D, p. 184)

Rousseau finishes his litany by arguing that the most mighty and rich would not feel happy if inequality ends because their happiness depends on being superior to others. This means that the competition will never stop and that there will always be those who want to triumph over others.

¹⁹⁴ He had heard stories about *Pongos* and *Orang-Outangs* and distinguished them as two different species, and supposed they might be humans; at least he did not find them less unlike humans than some of the uneducated explorers, he ironically commented. 'Orangutans' are now classified as *Pongo pygmaeus* and the word means 'man of the jungle' and many of the characteristics of Rousseau's pure state of nature are reminiscent of the special life of these animals. These apes live solitary and peaceful lives in the trees and their children do not stay with their mothers more than a few years until they have learned to manage on their own.

¹⁹⁵ He drew these conclusions from stories he had heard about unsuccessful trials to acclimatize savages in Western societies (see 2nd D, notes).

In Rousseau opinion, virtue lacked profoundness and had become a façade hiding emptiness; it was merely a display of pretentiousness (1st D). People followed strict rules of conduct and behaved artificially instead of using their own reason. Neither outer appearance nor inner thoughts had made them more decent than the poor and uneducated people living a simple life close to nature. “[A] vile and deceiving uniformity prevails in our morals, and all minds seem to have been cast in the same mold: constantly politeness demands, propriety commands: constantly one follows custom, never one’s own genius” (1st D, p. 8). Robust and strong human beings should not need a lot of displays and pretty phrases to demonstrate who they are. The natural humans that Rousseau depicted were not profoundly different or better than his contemporaries, but they did not hide behind all kinds of camouflage or pretend to be other or greater than they were. They communicated their intentions openly, according to Rousseau (1st D).

Civilized people, in comparison, hide their opinions behind a mask of polite words without any other meaning than to conceal their malicious and envious feelings. They seek their own glory by steadily discrediting others, instead of letting compassion bring them together. Side by side, praising each others with words, they live their lives in an endless competition. The more sciences and arts have developed the more natural virtues have been forgotten. Manners have taken the role of morals. Humans have developed the arts, sciences and luxury because of their depravity and idleness, not because of their cleverness. Luxury is the opposite of virtue, Rousseau claimed. When wealth is the ultimate goal, virtue is definitely sidestepped. Instead of virtue and ethics, money and wealth have become the aims of politics. Thus even human life is calculated in money (1st D). Luxury corrupts the rich and the poor simultaneously, one because of possession, the other because of the yearning it raises. Thus both become slaves of their desires and of public opinion. A basic rule of equality would be that no citizen should be allowed to be rich enough to buy another citizen and not so poor that they have to sell themselves (SC). However, virtue is not inborn for humans. Not wanting to harm anybody is typical but virtue amounts to overcoming base inclinations and it is not intrinsic but develops in connection with society (Kelly & Cook, 2000). “Virtue does not consist merely in being just, but in being so by triumphing over one’s passions, by ruling over one’s own heart” (LF, p. 267).

Rousseau saw savages as still living in a happy state, uninfected by civilization and its sciences and arts, and he thought that humans would be better off without the

ever-expanding knowledge that had become an end in itself (1st D). Just as a caring mother takes a dangerous weapon from the hands of her child, according to Rousseau, nature had tried to prevent humans from science. For that reason, humans are born unlettered. It would have been a total misfortune if they had been born learned. While the masses lack the satisfaction of having their immediate needs met and are denied moral dignity and recognition as fellow creatures with equal rights, others satisfy their vanity with things that are utterly unnecessary for daily human life and survival (ibid.). Rousseau was upset by all the inequities civilized life causes. Civilized life not only brought harm to the poor, who suffered because of shortage, but also to the rich, because of their greed:

Compare without prejudice the state of Civil man¹⁹⁶ with that of Savage man, and determine, if you can, how many new gates in addition to his wickedness, his needs, and his miseries, the first has opened to pain and to death. If you consider the mental pains that consume us, the violent passions that exhaust and waste us, the excessive labors that overburden the poor, the even more dangerous softness to which the rich abandon themselves, and cause the first to die of their needs and the others of their excesses. (2nd D, Note IX, p. 199)

Nature has tried to protect humans from the sciences, those dangerous weapons in the hands of such vain and narcissistic creatures, according to Rousseau. The sciences were acceptable if people did not become so occupied with them that they neglected more crucial human needs. He did not, nevertheless, attack education *per se* and downplay all knowledge, but the superficial route it had taken. Rousseau, in consequence, called the mind of the savages “limited” (2nd D, Note XI). Humans are born predestined for perfection, but they have free will and can choose how to use this aptitude. If humans do not use it wisely they are lead to their own downfall. Free will is no ungovernable will that allows them to do whatever they like (Dent, 1988).

The source of greed is the need to be recognized as superior, to be able to shine, according to Rousseau. Natural humans were satisfied with a life for themselves; they did not need others recognizing and adoring them and, hence, they made their decisions independently, without any others’ opinion; in other words, they were naturally free. While the civilized life is reduced to a façade of conformity, all decent human qualities have become empty appearances. In addition, the increased accessibility of goods and arts generated complicated social rules. Rousseau did not

¹⁹⁶ In French “*l’homme Civil*” (OC III, 202).

like all these general and unwritten rules¹⁹⁷ and was definitely not convinced that the new lifestyle increased human freedom. Civilized humans have forgotten who they are; their own existence is camouflaged both from themselves and in order to impress others (2nd D). They have given up their freedom and are trapped in their own chains.

Here everyone does the same thing in the same circumstance: everyone moves in time like the marches of a regiment in battle order: you would say that they are so many marionettes nailed to the same plank, or pulled by the same string. (JNH, p. 205)

Rousseau was especially critical of the urban lifestyle. In *Julie*, St. Preux (one of the leading characters in the novel) expresses his opinion about life in Paris:

[I]t is unbelievable how regulated, measured, weighed everything is in what they call etiquette; whatever is no longer in the sentiments, they have put into rules, and with them everything is rules. If this people of followers were full of original characters it would be impossible to know about it; for no man dares to be himself. *One must do as the others do*, is the primary maxim of wisdom in this country. *That is done, that is not done*. This is the supreme pronouncement.¹⁹⁸ (JNH, p. 205)

Rousseau saw goodness and virtue as complementary. For him, to know one's limit was natural goodness. Whereas goodness makes one follow one's own inclinations without harming anybody else, virtue allows individuals to overcome their own inclinations and succeed in benefitting the welfare of others (Kelly, Masters & Stillman, 1995). Virtue is not only being just, but a matter of combating one's own passions (LF). Civilization promotes greed: good persons have few needs; they are enough in themselves. When Rousseau blamed the sciences and arts for having made humans live a lie, it is the Platonic difference between reality and appearance that he echoes. In *the 1st Discourse*, Rousseau depicts two interesting gaps. Firstly, he exposes the gap between speaking well and acting well that connects to the gap between rhetoric and praxis in environmental education discussed earlier in Chapter Two. Secondly, he explains the gap between an educated person and a good person

¹⁹⁷ This idea about general rules that enslave people can be compared with Martin Heidegger's theory about 'das Man', the comfortable neutral existential mode that allows an individual to be both all people and nobody at the same time. The theory means, in short, that people tend to act as people in general; one enjoys, one has an opinion, one makes—but none is responsible (see Heidegger's *Being and Time*, 1996, see also Chapter One in this book).

¹⁹⁸ The italics are original.

that relates to the initial gap discussed in Chapter One; namely, the gap between knowledge and action. Thirdly, he identifies a gap between appearance and mental states, which means that people often deceive; they live a lie.¹⁹⁹

The conclusion Rousseau draws from his depiction of human history, is that a country where nobody breaks the law, but always act in accordance with the common harmony, does not need laws or any officials (2nd D). However, ambitious and cowardly individuals are always willing to risk their fortune and either obey or command. According to Rousseau, society does not appreciate honesty and praises virtuous sounding speech instead of virtuous living. For Rousseau, virtue is not just a matter of ethical rules; it is more a moral practice than a study. The truth is written in our own hearts if we are willing to search for it. A proper action does not necessarily go hand in hand with knowledge. We do not need to strive for tributes and a good reputation. Instead, we can do our utmost to act well.

5.3 Human Relation to Self and Others

Rousseau paid more attention to moral conduct than to ethical disputes and attacked the philosophers and ‘learned’ scholars for their inconsequential dissipations. He was very concerned about the way humans relate to their own being, a problematic relation that dictates their social behavior. The preconditions are good, but the outcome is mostly bankrupt. He wanted to challenge the way humans constitute themselves as ethical subjects. A basic task of his was to expose what it means to be human and he wanted to discuss this issue and inspire others to undertake self-transformation. As with Foucault’s (2005) descriptions of Ancient ethics, Rousseau related the concept of “know your self” to “care of your self”: one has to know the self in order to take care of it. For Rousseau, human life was about knowing oneself, knowing one’s fellows, one’s society, and what life all is about. However, mere knowledge was not enough: the knowledge had to lead to self-transformation that could generate a better life lived in common with others. Socrates had wanted to be the gadfly who stung the horses to run (see Plato’s *Apology*, 30e). Likewise, Rousseau obviously wanted to trigger his contemporaries, especially the Parisians, to care less about wealth, appearance, and knowledge for purposes of showing off and

¹⁹⁹ This problem is more obvious than ever at this moment in the early 21st century when it is possible to create your own virtual ‘second life’.

to care more about their moral conduct. Like Socrates, Rousseau wanted others to care for themselves and make their selves more morally perfect. The art of governing one's self was, for Socrates, connected to the art of governing society (Plato's *Alcibiades*, see also *Phaedo*, 115c). The relation between self-training and the joint shaping of more decent and equal societies is also obvious in Rousseau's thoughts. Such training starts with training of the body, continues with the soul, and the ultimate ideal should be good societies built of and by good citizens who all care most about the common good.

Two Modes of Self-image

All humans are somehow sensitive, according to Rousseau. "Sensitivity is the principle of all action"²⁰⁰.... God himself is sensitive since he acts" (RJJ, p.112). Sensitivity is twofold; one aspect, the physical and passive part, has self-preservation and the survival of the human species as its aim, while the other is moral and is actively attends to other human beings. This attention fluctuates in intention and can be either a positive attraction or a negative repulsion. Nature generates positive sensitivity and it strives to nurture human beings through love and gentle enthusiasm, while negative sensitivity makes them constrict each other through hatred and malicious passions. In Note XV in the 2nd *Discourse* Rousseau introduces the concepts of *amour-de-soi-même*²⁰¹ and *amour-propre*. *Amour-de-soi* (shorter form of *amour-de-soi-même*) produces positive sensitivity and makes individuals search for what is good for them, whereas *amour-propre* can degenerate and produce either positive or negative sensitivity.

Amour-de-soi

Rousseau took *amour-de-soi* to mean a natural inborn feature that helps all animals protect themselves and safeguard their own survival. In a state of nature where there is no opportunity to regard the other individual's actions as intentionally evil, no one

²⁰⁰ "La sensibilité est le principe de toute action" (OC I, p. 805).

²⁰¹ It is difficult to translate Rousseau's concepts of *amour-de-soi* and *amour-propre* and many alternatives have been offered. Broome (1963) translates *amour-de-soi* to Self-Interest and *amour-propre* to Selfish-Interest, but to avoid confusion, I will use the French terms. Rousseau was not the one who invented these concepts. For example Aristotle and Augustine discussed the self-love issue. Likewise, all major religions emphasise some kind of self-love. According to Buddhism, humans reach Nirvana when they distinguish between false and true self-love, and the Bible commands humans to love their neighbors as they do themselves. (*Amour-de-soi* and *amour-propre* are always italicized in E)

can be insulted. When a beast steals food from humans they can feel anger, but not indignation because they know or feel that the animal only acts instinctively. “*Amour-de-soi*[-*même*] signifies a concern, a care, to look to, guard, preserve and foster one’s own personal well-being, guided by a clear sense or idea of what the well-being of oneself comprises and requires” (Dent, 1988, p. 20). This concern for one’s own well-being is thus not equivalent with egoism or vanity, but is only a drive for actual self-preservation. It is not wrong that living creatures strive to safeguard themselves; it is something healthy and favorable.

[T]he first movements of nature are always right. There is no original perversity in the human heart. There is not a single vice to be found in it of which it cannot be said how and whence it entered. (E, p. 92)

Whereas Rousseau’s use of *amour-de-soi* can be regarded as a constant norm in contrast to the socially stimulated *amour-propre* (Bernstein, 1990), it is not constant in its appearance. It changes according to the constitution of the person. There is nonetheless a solid core of care for one’s personal good, independent of the shifting varieties of *amour-de-soi*.

Amour-propre

Amour-propre, in contrast, is an artificial sensation relative to a social condition. It can be described as a concern to be something—an individual—for others and to be reciprocally engaged with others. *Amour-propre* arises “from social relations, from the progress of ideas, and from the cultivation of the mind” (RJJ, p. 113) and it makes humans strive for an extension of their natural being through recognition and admiration. *Amour-de-soi* is gentle and loving and reaches out for one’s own happiness. If it is deflected into *amour-propre* by some complication, it can turn into a negative feeling that aims at harming others (RJJ). Comparison nourishes *amour-propre* that, in contrast to *amour-de-soi*, is a love of oneself for being unique and different from others. In its “inflamed”²⁰² form, *amour-propre* entails feeling superior to others; it is a kind of pride in oneself for being better than others (RSW, see also

²⁰² In *Émile* Rousseau writes that one can “inflame” (*qu’enflamer*, OV IV, p 540) a child’s *amour-propre* (E, p. 247). Consequently, Dent (1988) uses the adjective ‘inflamed’ when he talks about a bad *amour-propre* and Bernstein uses ‘deformed’ in contrast to ‘benign’ forms of *amour-propre*. Rousseau claims that “hateful and irascible passions are born of *amour-propre* in contrast to “gentle and affectionate passions” that are born of *amour-de-soi* (E, p. 214).

Dent, 1988). While *amour-de-soi* is satisfied when basic needs are satisfied, inflamed *amour-propre* starts to compare and command others and measures itself in relation to others, resulting in struggle and superiority. This is an endless process: the higher one rises above the other, the more eagerly the individual struggles ever-more upward. (RJJ) In contrast, *amour-propre* cannot survive in solitude where nothing nourishes it; honest social individuals suffer in social situations and because they are always searching for truthfulness they cannot accept false impressions. This was Rousseau's own experience: "I am my own only when I am alone. Apart from that I am the plaything of all those around me" (RSW, p. 85). Accordingly, *amour-de-soi* fosters benevolent feelings in contrast to *amour-propre* that, in the worst case, produces hate and anger. Inflamed *amour-propre* brings about self-alienation (E), and humans become strangers from themselves, their own proper needs, and their purpose, and thus they start acting unnatural (Dent, 1988). But, as Dent (ibid.) and Bernstein (1990) both point out, *amour-propre* does not always need to become inflamed; it can take another course. This is also what Rousseau states in *Émile*:

This *amour-propre* in itself or relative to us is good and useful; and since it has no necessary relation to others, it is in this respect naturally neutral. It becomes good or bad only by the application made of it and the relations given to it. (E, p. 92)

If it was possible to unmask civilized humans and put aside all social influences in the form of prejudices and bad habits, they would come close to the natural state. Repeatedly, the natural human being is seen as a symbol for what modern humans would be like if all the social and artificial elements were removed from their selves; or, rather, if these elements could be avoided from the very beginning. It is civilization that fosters *amour-propre* damagingly; in itself it is merely the human "being-for others," according to Bernstein (1990, p. 71), who compares Rousseau's concept of *amour-propre* with Hegel's concept of "self-consciousness." When interpreting *amour-propre* as self-consciousness, humans' full awareness of themselves becomes dependent on social interventions. This was actually Rousseau's intention, too; to make humans aware of their own dispositions, and he never denied that humans' natural role was to live in a society. But, if society was corrupt and made humans expand negatively, their socialization had to be corrected. But when Rousseau used the concept of consciousness (without self-) he entailed, like Plutarch

(see Foucault, 2005), an inner voice that participated in internal discourse with the self and tried to say what is right (see E).

The pressure of commonly held prejudices in society is a strong force to fight. In his *Dialogues* Rousseau talks about *amour-propre*, using the word “game,” and indicates a practice that nurtures prejudices. “One wants to guess, one wants to be perceptive. It is the natural game of *amour-propre*: one sees what one believes and not what one sees. A person explains everything according to his prejudice...” (RJJ, p. 64). True passions are replaced with diverse interests, and the folly of *amour-propre*, vanity, suppresses the passions even more.

Consequently, *amour-propre* has its origin in social relations, while *amour-de-soi* flourishes in a state of nature. The more humans move away from a natural life, where their main occupation is to satisfy immediate needs, the more *amour-propre* is promoted. And the more enlightened the society is, the more advanced are the means of *amour-propre*, according to Rousseau. Education or enlightenment does not prevent the growth of harmful competition but, instead, only promotes inflamed *amour-propre* that enslaves and alienates humans from themselves. *Amour-propre* that has taken that route simply makes humans live a lie. “Slaves and dupes of *amour-propre*, they live not to live but to make others believe they lived” (RJJ, p. 214). When *amour-propre* is met equally for everyone, the equality is perfect (Dent, 1998/2006). Rousseau did not reject competition, as long as the target was not to exceed the other in anything else than unselfish good deeds. People who behaved decently all had the right to be honored.

Besides *amour-de-soi* striving for self-preservation, natural humans are also equipped with an intrinsic sense for realizing that their fellow creatures are similar in their sufferings (2nd D, Note X). Rousseau called this sense *la pitié* (compassion, pity). When reason regulates compassion and modifies *amour-de-soi*, humans will develop their humanity and virtue. When the activity of *amour-de-soi* is tempered by compassion, it aims at protecting the survival of all of humankind. Compassion is in the state of nature what laws, morals, and virtues are in civilization. Inflamed *Amour-propre*, on the other hand, rebels against reason and deflects humans from following their own instinct²⁰³ or what is natural. (RSW) Pity entails that everybody has an innate desire to care for another human being because of the other’s vulnerability, regardless of class, position, or other such condition. The help one gives, however,

²⁰³ Instead of “instinct” Rousseau sometimes writes about “fate” or “heart.”

should not be built on a longing for benefit, gratitude, or compensation; only on a love for the other (Dent, 1998/2006; E). Otherwise inflamed *amour-propre* is the ruling passion. Kant obviously build on the same idea in *The Metaphysics of Morals* where he accentuated the duties humans owe to each other:

To *do good* to other human beings insofar as we can is a duty, whether one loves them or not; and even if one had to remark sadly that our species, on closer acquaintance, is not particularly lovable, that would not detract from the force of this duty. – But *hatred of them* is always *hateful*, even when it takes the form merely of completely avoiding them (separatist misanthropy), without active hostility toward them. For benevolence always remains a duty, even toward a misanthropist, whom one cannot indeed love but to whom one can still do good.²⁰⁴ (Kant, 1797/1996, 6:402)

Human Distinctiveness

It is not rationality, according to Rousseau, that divides humans from other animals, but the human capacity for freely chosen action. Nature rules over the animals and directs them to act in particular ways; humans, instead, have the power to choose for themselves and to decide if they will obey nature or not. On the other hand, deprived humans are not capable of listening to nature anymore, and they engage in exaggerations that destroy their lives. Every animal has ideas gained through its senses, but only humans have *free will* that is a spiritual talent and all but automatic. Another distinction between humans and brutes is the human ability for self-improvement, *perfectibility*.²⁰⁵ Rousseau did not deny that humans have an intrinsic drive for improvement of some kind, even though this drive would not inevitably lead to a better future. He indicated that this drive, perfectibility, is already a dormant faculty in the state of nature and, although an intrinsic natural trait, it can be further improved by education (e.g., RJJ). Lähde (2008, p. 96) argues that by perfectibility Rousseau “refers to the potential of developing novel faculties, and it seems to be mostly latent in the pure state of nature, whereas this unnamed mimetic ability refers to the way natural men can learn to imitate the behavior of other animals.” “Other animals” obviously also includes other humans. Mimetic ability (ability to imitate) is connected to instinct (nature) and perfectibility to reason: “only perfectibility truly

²⁰⁴ The italics are original.

²⁰⁵ Rousseau was not the first who introduced the term *perfectibility*, although he contributed to its application (see Chapter Two).

removes humans from the realm of instinct and mimetic behavior” (ibid., p. 97). Humans can learn from experience to control their environment and to change their behavior and thus increase their benefits (Dent, 1992). In an extended situation free will regulates conduct; it enables or holds back actions. Another feature of *amour-de-soi* is that it makes individuals satisfied with who they are and ready to live in accordance with the will of their Creator (ibid.). A problem that makes changing one’s life course such a great challenge is that most people do not know in their innermost being what they want. In that situation, life becomes not only a struggle with others, but also an internal battle with one’s self. Even Rousseau personally experienced many conflicting interests (e.g., RJJ). A third distinction is that humans have a *spiritual soul*. Humans are the only creatures that are capable of improvements both as a species and as individuals. In the state of nature, humans, like other animals, see and feel. The first operations of the human soul are to will and not to will, to desire, and to fear. Desires lead humans towards knowledge and improvements, and they desire what they physically want (2nd D, Broome, 1963).

Amour-de-soi can be latently expansive in seeking to reinforce our being, even in senses other than of satisfying immediate needs; humans simply seek to make the most of their beings (Cooper, 2004/2006). I think we cannot deny some kind of expansion in Rousseau’s state of nature at this point. However, I agree with Dent (1992) that Rousseau did not mean that *amour-de-soi* was replaced by *amour-propre* when humans became social, but that *amour-propre* was one route *amour-de-soi* could take. Mutual support, on the contrary, strengthens *amour-de-soi* and sustains a positive expansion of *amour-propre*. Human interactions are, however, seldom that unselfish. Instead, when humans extend their relations, they experience their own worth through their superiority to others. They start to claim recognition for ascendancy instead of equality (Ibid.). In *Reveries* Rousseau talks about his expansive soul that can extend out to other objects and make him even forget himself. But if he did not get any response, he felt alienated from himself. This way of being occupied with the external world was congenial to him, but he nonetheless felt uncomfortable with himself and others and restlessly moved around. “I was entirely devoted to what was alien to me; and in the continual agitations of my heart, I experienced all the vicissitudes of human things” (Rousseau, RSW, p. 69). In the situation Rousseau describes, he did definitely not find his life superior to others, but he tried to cope with his own situation and accept the life as it had taken shape, even though he felt unloved by all people. But, he had learned “to bear the yoke of necessity without

murmur” (ibid., p. 71) when he realized that his reactions to others was rooted in his *amour-propre*. Turning back to himself, Rousseau was satisfied with being good within his own framework of values, and he called this state “the natural order” (ibid., p. 73). But he stated that his Stoical acceptance is not his doing but should be attributed to his enemies. They had made him indifferent to adversity, but he nonetheless struggles and overcomes their evil with his strength. In a world too unpleasant for Rousseau, he fled to the imaginary realm he had created in accordance with his heart. His withdrawal from other people and their wickedness drove him to the natural world:

The moment I slip away from the retinue of the wicked is delightful, and as soon as I find myself under the trees and in the midst of greenery, I believe I am in the earthly paradise and I savor an inner pleasure as intense as if I were the happiest of mortals” (ibid., p. 76).

A little later he continues: “It is only after having detached myself from social passions and their sad retinue that I have again found nature with all its charms” (ibid.). While humans have this expansive drive, their beneficial *amour-de-soi* can be overwhelmed by inflamed *amour-propre* that has a tendency to grow in the direction of vice. Then humans easily consider the world as being filled with obstacles to overcome (Cooper, 2004/2006). When they want to be all they are and even more, they soon start to see life as a race. Expansion is nourished by strength or power and accrues both in *amour-de-soi* and in *amour-propre* (ibid.). While *amour-propre* strives for external expansion, *amour-de-soi* extends towards one’s own being and leads to the enjoyment of one’s own existence. Strong souls can expand positively, while the weak strive for self-fulfillment through and on behalf of others (E), and positive self-esteem can be a driving force for positive development.

Self-esteem²⁰⁶ is the greatest motive force of proud souls. Amour-propre, fertile in illusions, disguises itself and passes itself off as this esteem. But when the fraud is finally discovered and amour-propre can no longer hide itself, from then on it is no more to be feared; and even though we stifle it with difficulty, we at least easily overcome it. (RSW, p. 73)

I read from Rousseau that the more aware individuals become of their own shortcomings, the more confidently their self-esteem can develop and the less

²⁰⁶ In French ‘L’estime de soi-même’ (OC, I, p.1079).

egoistic and exaggerated is their self-esteem. And, like Dent (1988), I consider the encouragement of recognition by others as essential for the development of self-esteem (Österlund & Wolff, 2006). If *amour-propre* develops negatively, it seeks dominance and mastery over others; but it can also take another direction, as its basic purpose is solely a wish for recognition by others (see Dent, 1988; E). The education of the fictive pupil Émile involves a situation or a space that corresponds to the state of nature. Rousseau's description of Émile's education is a thorough account of how Rousseau looked upon the possibility of avoiding inflamed *amour-propre*. Small children are provided with *amour-de-soi* and education has to strive to protect them from influences that would convert their positive self-relation to an inflamed *amour-propre* and make them compare themselves with others and become nourished with pride, vanity, or a destructive self-image.

When Rousseau talked about the ability of humans to extend their being, he saw this ability as a power humans possess in contrast to animals. Such extension is, however, not directed towards any particular end (Cooper, 2004/2006). Children in particular have a strong desire to extend their own being. This extension takes the shape of creativity and activity, since children are predestined to experience the concrete world (ibid.).

In the state of power and strength the desire to extend our being takes us out of ourselves and causes us to leap as far as is possible for us. But since the intellectual world is still unknown to us, our thought does not go farther than our eyes, and our understanding is extended only along with the space it measures. (E, p. 168)

When *amour-propre* is involved, a desired object is desired mostly as a means for reaching an extended being, but this does not necessarily mean that expansion is reached when the desired is filled. In *The Nicomachean Ethics*, Aristotle argues that the perfect aim is something worthwhile choosing for its own sake and not because of some narrow instrumental aim. Happiness and freedom are perfect aims and thus independent and limitless. Freedom in this sense (as a perfect aim) is not selfish, but altruistic. A problem arises when the desire to extend one's being is manifested through gaining *possessions*. Then life becomes nothing but an endless struggle for having things, where our possessions enslave us. While Rousseau pointed out that

living is acting, Cooper (2004/2006) distinguishes between *having* and *doing*,²⁰⁷ where “having” is an extension through possessions, and “doing” is, instead, an extension of one’s own existence. Referring to Aristotle, Cooper takes “having” to entail external goods, while “doing” entails an activity undertaken for its own sake or merely for the experience as its own end. We become enslaved when the desire to own things controls us.

Another extension of one’s own being is the desire for *self-mastery*; virtue is a kind of self-overcoming, where one part of the self manages to rise above another. The active moral part of the self, the true self, rules. Pity can also be seen as a kind of extension, and among its consequences are friendship, patriotism, and citizens identifying with each others, family members, romantic love, desire for knowledge and understanding (Cooper, 2004/2006). Dent (1992) does not look upon the way Rousseau depicts the problems humans face when they become social as hopelessness, but he argues instead that Rousseau wanted to show that humans are definitely very dependent on good relations with others. Rousseau’s intention for detailing the complexities of human relations was, according to Dent, to show that we need to focus on our relationships and on ourselves as parts in these relations if we want to change the world into a more decent one.

In Rousseau’s opinion, “the study suitable for man is that of his relations” (E, p. 214). This is an occupation that ought to start when humans begin to understand moral criteria for relating to others, and has to last throughout life. Mutual recognition, where both parts live in harmony without controlling the other, is the ideal situation. In extreme situations, on one hand, humans are totally isolated and left on their own and driven to choose solitude; on the other hand, they give up their selves to be wholly controlled by others (Dent, 1988). Left totally alone, not recognized by anybody, they become nothing and their existence as social beings end. But, if one considers the quest for recognition from a Foucauldian power perspective, we realize that the real life situations are much more complicated than this hypothetical play between extremes and ideals. While human conduct is a complexly co-operative network, it is not immediately obvious who is controlled by whom or what. And when Rousseau suggested a negative education, at least one of his intentions might have been to show that solitude and withdrawal from social

²⁰⁷ Also, Frankfurt School’s philosophers addressed the distinction between having and doing, especially Marcuse and Fromm. The want of external goods, like wealth, prestige or some other possession, becomes the primary existential mode and can be seen as a problematic diminishing of one’s own existence. Marcuse called that kind of existence “one dimensional.”

pressure help one get a clear view of one's own situation, contribute to caring for the self and to figuring out who one is and what one really wants and needs. This self-training helps to free one's self from prejudices and to understand what direction one's own will wants to take. In other situations, the cure could be to spend time with others and learn to know one's self through the other in a reciprocal 'giving' and 'being given' (not taking) condition. And, in such reciprocating situations, *amour-propre* ensures that the individual is met and honored as a particular being with its own wants and abilities (see JNH, see also Dent, 1988). *Amour-propre* interacts with self-knowledge and makes humans who they are. The desire for extending one's being can be given proper direction through self-transformation or education, according to Rousseau. Collective extension is emphasized through active participation in society or in family life. The inborn capacity for extension is launched in infancy and lasts the entire life. But, self-transformation is an occupation for adults (though it may need guidance) while education is for directing the young.

5.4 Being Social

[B]y first going back to the state of nature, we shall examine whether men are born enslaved or free, associated with one another or independent. Whether they join together voluntarily or by force. Whether the force which joins them can form a permanent right by which this prior force remains obligatory, even when it is surmounted by another. (E, p. 459)

Rousseau depicted humans in the state of nature as solitary individuals living without any stable residence (2nd D). They did not cultivate the earth; such an occupation did not make sense if anyone could come by and confiscate the crop. In Rousseau's mind, no one chooses work before leisure if work does not confer advantages. The land had to be divided before cultivation could be an intelligent undertaking. In *Robinson Crusoe*, a book that Rousseau so much appreciated (E), Crusoe had developed many kinds of industry even before he got a companion—partly because he needed the things he produced, but also because he is bored and, of course, in part because he is already civilized and used to tools of all kinds. Rousseau did not address overcoming boredom as a motive for work. The state of nature he depicted included tranquility, but this state was not monotonous. The use of language is another extension Rousseau argued has its origin in collective life. It must have taken

a long time to develop all languages and the words needed to express abstract ideas, according to Rousseau, a skill that he argued that animals will never learn²⁰⁸ (2nd D). Not all contemporary researchers would agree with this argument.

The Family

The family is often seen as the original model for political societies; a political leader is the analogue of the father and the people his children. Rousseau warned against too easily drawing superficial parallels between states and families. He saw a big difference between the way a father loves his children and is repaid by love, and the condition of a political leader whose only advantage is the pleasure of ruling (SC). Family love is an expression of extensive being, according to Cooper (2004/2006), where family members and citizens who identify with one another can be seen as extending their being towards each other. But civilized society is not developed from the model of fatherly power, according to Rousseau, because the duties and rights of the state and the family are so different. The father is only the master of his children as long as they need his protection; afterwards they should be independent and equal. In Rousseau's view human beings are predestinated for freedom, but they need care and support to strive for and maintain their own freedom. No parents have the right to deprive their children of their freedom, and this applies to others, as well (DPE). In Rousseau's opinion, to say that a child of a slave is born a slave is the same as to say that human beings are not born as humans (2nd D), although the innate traits of a savage and a child are compatible (see also Scott, 1992/2006; Starobinski, 1988). In short, Rousseau held that since everyone is born free, slavery is contrary to human nature and does not exist in the state of nature. Accordingly, when children are in a natural state—that is, in a state where no slavery exists—no child can become a slave, even if its parents are slaves. Likewise, no one is born a master with an innate right to rule (E).

In the family, Rousseau depicts the father as the one who commands; power is not equally divided between the father and the mother. However, the father has to listen to “the voice of nature” and “guard himself against depravity, and prevent his

²⁰⁸ Rousseau thoroughly developed his ideas about how language was born. I will not discuss that subject here, but the interested reader can search for knowledge about this issue both from the 2nd *Discourse* and from his *Essay on the Origin of Language* that was initially meant to be a part of the 2nd *Discourse*.

natural inclinations from being corrupted” (DPE, p. 125). The father is the manager of his entire household, including wife, children, and servants. Children have to obey their father, first of necessity and later of gratitude. It is also their task to take care of their father when he gets old (DPE). Rousseau, nevertheless, repeatedly addresses customs that give fathers the right to choose both professions and partners for their children, thus neglecting their children’s own aptitudes and aspirations. He accuses fathers for the suffering they cause their children because of their own craving for money (2nd D, Note IX; JNH).

In *Julie* Rousseau created an image of a happy family life where friendship, openness, and shared responsibility prevailed. The adults in the novel mutually strive to make their home cheerful and provide models of friendly behavior for their children. In addition to parents, there are also other people²⁰⁹ involved in the tranquil family life and all adults treat each other honestly and respectfully. The women do not ‘own’ their children,²¹⁰ but share the responsibility, so that they have two mothers, Julie and her close friend and cousin Claire, to love and to receive love. The adults cultivate the self much in line with what Seneca described: they live a gentle life in the countryside, participate in the peasant’s life, share their time between intellectual and rural activities, and write diary-like letters exposing their inner struggles and feelings (cf. Seneca in Foucault, 1997e, 2005). The practice of the self was a collective undertaking, where one rule was to always be frank and to assist one another in the care of the self (cf., Foucault, 2005).

The Social Contract and the General Will

Rousseau supposed that humans in their natural state united because this was their only way to survive. Yet, as his primary concern the question arose of how free humans, focusing on their own wellbeing and survival, could agree on common rules while still protecting their own interest (SC). In this stage of his reasoning Rousseau starts creating his idea of a *social contract* based on *the general will*. He brings into consideration a stage of social development that was not immediately apparent and posits this as preliminary stage of the development of human societies (see 2nd D). It

²⁰⁹ In addition to Julie and her husband Wolmar, other adults living with the family are Julie’s father, the children’s tutor and Julie’s former lover St. Preux, Julie’s friend Claire and her daughter, servants, and close friends living with them from time to time.

²¹⁰ Julie had two sons and Claire one daughter.

is a model of how humans could be both united and remain free. But, to understand this reasoning, it is necessary to restrict the interpretation of the word “free” to an explanation that comes close to what was called “positive freedom” in Chapter One. The “freedom” Rousseau talked about was human freedom that takes form through self-realization as moral and rational beings with natural inclinations both as members of the human species and as unique individuals. In addition, he argued that they have equal rights as members of society. However, while no one has priority for membership, society based on equality depends on reciprocal duties everybody has to fulfill. This is, so to speak, the price individuals must pay for the advantages of social life. In Rousseau’s own words:

These clauses, properly understood, may be reduced to one—the total alienation of each associate, together with all his rights, to the whole community; for, in the first place, as each gives himself absolutely, the conditions are the same for all; and, this being so, no one has any interest in making them burdensome to others. (SC, p. 8)

When all individuals thus give of themselves and what is theirs (their persons and powers) for the general will of which they are only a part, they are repaid to their individual benefit. A “moral and collective body” is then shaped (SC, p. 8-9). Rousseau used to call this union the “body politic” and describes it using the human body as comparison.²¹¹ He saw the Sovereign as a united body of power consisting of all the citizens in a state ruled by the common general will of all. The will of the Sovereign drives from the common general will of all and is directed implementing that will; the commitments are mutual and everybody is treated equally. However, some individuals have personal interests and yet want to enjoy the benefits of their citizenship, even if they are not willing to fulfill their duties as citizens (SC). These turn out to be what are called “free riders.”²¹² Such individuals think only of their own best interests and are not willing to take responsibility for the common interest that allows them to enjoy such benefits over the long run. They leave the ‘payments’ they owe society to the others. When sorting out who shall pay the costs of the polluted environment in contemporary societies, the dilemma of ‘free riding’ often

²¹¹ I have already dealt with how Foucault saw a rhetorical shift from resemblance to representation in the 18th century and I claimed that this was not an obviously quick shift. Rousseau wrote with one foot in resemblance and the other in representation.

²¹² ‘Free rider’ is a concept Garrett Hardin raised in his essay *The Tragedy of the Commons* first published in *Science* 1968.

occurs. A great many people want a clean environment, but they neither want to participate in the costs nor sacrifice their living standards. But Rousseau argued that those who do not obey the general will must be forced to by the whole of society. This is what Rousseau calls the key to the “political machinery.” Everyone has to assent to the social contract and become part of the general will that is collectively social both in its aims and its essence (SC). “He who wills the end wills the means also, and the means must involve some risks, and even some losses” (SC, p. 16). Humans who have left their natural state can no longer blindly follow their desires; they have to reason and think about what is best for all and for themselves in the long run. In Rousseau’s own words:

Although, in this state, he deprives himself of some advantages which he got from nature, he gains in return others so great, his faculties are so stimulated and developed, his ideas so extended, his feelings so ennobled, and his whole soul so uplifted, that, did not the abuses of this new condition often degrade him below that which he left, he would be bound to bless continually the happy moment which took him from it for ever, and, instead of a stupid and unimaginative animal, made him an intelligent being and a man. (SC, p. 10)

What, then, is lost when they take on the role of citizens? It is the natural liberty to do and to take whatever they like. Yet, they get something in return: civil liberty and the right to their possessions. In addition, they gain moral liberty. As a part of the sovereignty, prescribing and following the laws amounts to liberty or autonomy. This amounts to being the master of one’s self instead of a slave to one’s own desires. Those who think they have the right to rob others of their land are slaves to their greed. Even though humans are born with natural differences (physical and mental), they become equal through the social contract and the rights it advances. To protect one’s own life and rights, one has to be even willing to pay with one’s own life, if needed.²¹³ ‘Citizens’ are politically active members of the state; others cannot act for them. Being a citizen implies making an equal contribution to society, formulating the rules that organize the life shared with other citizens, and being protected by all other citizens in this role (SC; see also Dent, 1992). When particular members of the society are treated as secondary to the laws of the state, they are called “subjects,” according to Rousseau (SC). Individuals who have subjected themselves to the

²¹³ Rousseau has been widely criticized for supporting the death sentence.

general will obey themselves; when they obey the sovereign they become freer under the social contract than in the state of nature (E).

At once, in place of the individual personality of each contracting party, this act of association creates a moral and collective body, composed of as many members as the assembly contains votes, and receiving from this act its unity, its common identity, its life and its will. This public person, so formed by the union of all other persons formerly took the name of city, and now takes that of Republic or body politic; it is called by its members State when passive. Sovereign when active, and Power when compared with others like itself. Those who are associated in it take collectively the name of people, and severally are called citizens, as sharing in the sovereign power, and subjects, as being under the laws of the State. But these terms are often confused and taken one for another: it is enough to know how to distinguish them when they are being used with precision. (SC, p. 8-9)

Common laws protect the citizens and aim at the most profound goods, freedom, and equality, according to Rousseau (SC). Yet, there is a problem because all the citizens do not necessarily know what is good. Following Aristotle, Rousseau (SC, p. 60) states that “men always love what is good or what they find good; it is in judging what is good that they go wrong.” Free action depends on two variables: the will, and ability. Deeds are thus dependent on both a wish and a capacity to act. Freedom and justice are not always given first priority. But the lawgiver is well aware that there are forces other than laws that sustain society: the power of habits, such as customs and public opinion that are engraved in the minds and hearts of the citizens (SC). These forces create the vision of what is worthwhile seeking because of its ‘normality’ and signifies what Foucault calls “governmentality,” a disciplined mentality for being governed. But in a perfect social state, this disposition need not result in anything negative. In an ideal state, citizens who are free from inner conflicts uphold the social contract by constantly transforming and reshaping society (Shklar, 1966/2006). Yet, Rousseau points out that the general opinion fluctuates from place to place and individuals can be exposed to different alternatives in different settings (JNH). In reality, in large societies, like big cities with many people living close to each other, the social impact makes individuals reject their innermost nature, whereas natural settings have the opposite effect, according to Rousseau (ibid.).

5.5 *Humans in the Natural World*

Nature was the site for Rousseau's natural individual and the natural society. He saw natural sites as places where *amour-de-soi* resided and as places where inflamed forms of *amour-propre* were avoidable, and regarded them as retreats from arrogance, pride, and jealousy (see, e.g., RSW). Despite his deep political considerations, Rousseau has been called a romantic, and nobody reading the beginning of the following quotation, can disagree with this attribution. He sought individual and social harmony, both in a broader philosophical perspective and in his own life. Nature was situated deeply in these visions, and while natural humans were a part of his vision of nature, he did not always find them there. The end of the quotation shows that the world seldom fulfilled his dreams.

When the ardent desire for that happy and sweet life which flees from me and for which I was born comes to enflame my imagination, it always settles itself in the Pays de Vaud, near the lake, in the charming countryside. I absolutely need an orchard by the side of this lake and no other; I need a firm friend, a loveable woman, a cow, a little boat. I will not enjoy a perfect happiness on earth until I have all that. (C, p. 127)

This story tells about how Rousseau dreamed of enjoying his existence, and of only extending his being benevolently. On the other hand, real life in the natural world is not equivalent to visionary projects concerning it, and its occupants were not necessarily to his taste, even if the place was. Perfect harmony is only a chimera. He continues:

I laugh at the simplicity with which I have gone to that country several times solely to seek this imaginary happiness. I have always been surprised to find the inhabitants there, above all the women, of a completely different character from the one I seek. How ill-matched it seemed to me! To me, the country and the people with whom it is covered have never appeared to be made for each other. (C, p. 127-128)

When Rousseau described the natural world, he was not only talking about a place for rest and recovery, he was, on the one hand, also depicting a divine system of sublime or transcendent landscapes and, on the other hand, describing something quite apart from him, a site filled with pieces laid down for empirical investigation and use. Sometimes it also sounds like he regarded the natural world as a close friend—the

best and most trustful of them all. The natural world was the perfect space for reveries; moments of joy merely for their own sake (see RSW). In *Dialogues* he describes the natural world in his ideal world very poetically:

All nature is so beautiful there²¹⁴ that its contemplation, inflaming souls with love for such a touching tableau, inspires in them both the desire to contribute to this beautiful system and the fear of troubling its harmony; and from this comes an exquisite sensitivity which gives those endowed with it immediate enjoyment unknown to hearts that the same contemplations have not aroused. (RJJ, p. 9)

This describes nature as a system having intrinsic value; for those who are passionate enough to be attached, it is a place to enjoy one's own being. Elsewhere in the same book, he depicts the scenery of the natural world with a list of many attributes: "Beautiful sounds, a beautiful sky, a beautiful landscape, a beautiful lake, flowers, odors, beautiful eyes, a gentle look..." (RJJ, p. 114). All of these qualities contributed to Rousseau's wellbeing, but it is unclear if the eyes and the look come from another human being, a bird, Mother Nature, or something else. He writes about one spring when he repeatedly took long morning walks to listen to the nightingale, but the birds alone could not awaken his feelings. He needed the entirety of the forest, water, and solitude to enjoy the birds—a harmonious unity.

But enlivened by nature and arrayed in its nuptial dress amidst brooks and the song of birds, the earth, in the harmony of the three realms,²¹⁵ offers man a spectacle filled with life, interest, and charm—the only spectacle in the world of which his eyes and his heart never weary...and through a delightful intoxication he loses himself in the immensity of this beautiful system with which he feels himself one. (RSW, p. 59)

Rousseau not only enjoyed the natural world aesthetically and sympathetically, he was also curious about damage to it. Leaning on de Buffon's²¹⁶ writings, Rousseau pointed out the problems with zealous tree cutting for fuel and other purposes and the destruction of cultivated land due to overuse. In the 2nd *Discourse*, in one detailed

²¹⁴ "There" refers to Rousseau's utopian vision.

²¹⁵ The three realms: the kingdom of stones, the kingdom of plants, and the kingdom of animals (von Linné, 1749/1978a). Compare with Chapter Four.

²¹⁶ Georges-Louis Leclerc de Buffon was a French naturalist and author. His major work is *Histoire Naturelle* in 36 volumes published between 1749 and 1789 contributed to Enlightenment literature. In this work he describes a nonreligious biological and geological history of the earth.

sentence, he powerfully describes the means by which humans (he uses the word *we*) have made themselves so miserable:

When, on the one hand, one considers men's tremendous labors, so many Sciences investigated, so many arts invented, so many forces employed; chasms filled, mountains leveled, rocks split, rivers made navigable, lands cleared, lakes dug, swamps drained, huge buildings erected on land, the sea covered with Ships and Sailors; and when, on the other hand, one inquires with a little meditation into the true advantages that have resulted from all this for the happiness of the human species; one cannot fail to be struck by the astonishing disproportion between these things, and deplore man's blindness which, in order to feed his insane pride and I know not what vain self-admiration, causes him eagerly to run after all the miseries of which he is susceptible, and which beneficent Nature had taken care to keep from him. (2nd D, Note IX, p. 197)

Accordingly, nature is seen as a force that prevents humans from being foolish. Later in the same note, Rousseau also addresses of the many health problems that result from a modern life style. Similar health care and hygienic arguments are common in the educational advice given in *Émile*. This was not unique because, at this time, health was important for the growing populations of European countries (see, e.g., Foucault, 2000e). Air quality was especially of great concern; polluted air and water were both seen as pathogenic. Rousseau was well aware of health risks such as contaminated food, dangerous medicine, or air pollution and he emphasized that humans can make mistakes and purposely cause damage. The modern lifestyle is fragile and dishonesty, unconcern for life, and other consequences of greediness damage the human body.

If you think of the horrendous combinations of foods, their noxious seasonings, the spoiled provisions, the adulterated drugs, the villainies of those who sell them, the mistakes of those who administer them, the poisonous Utensils in which they are prepared; if you attend to the epidemics bred by the bad air wherever large numbers of men gathered together... (2nd D, Note IX, p. 199)

Following this, Rousseau discusses large-scale damage from such events as fires and earthquakes. It is worthwhile noting that in the same year the 2nd *Discourse* was published, 1755, an earthquake followed by a tsunami and a fire took place in Lisbon and killed around sixty thousand people. His detailed description of this event concludes with a judgment about how nature hits back against irrepressible humans, an argument that is still used in environmental debates: "you will sense how dearly

Nature makes us pay for the contempt we have showed for its lessons” (ibid.). Mother Nature seems to indiscriminately punish her children collectively. What does Rousseau mean by “the contempt we have showed her lessons”? In the subsequent text it seems as though he simply insinuates that humans intrinsically know how to act but do not act in accordance with this knowledge. At the very least he meant that some enlightened individuals have kept quiet about despoliations and neither informed others about issues such as the sanitary and medical irritants of warfare and shipping nor about all the brutal costs of birth prevention (2nd D, Note IX). Their inflamed *amour-propre* is stronger than their compassion. Later on in Note IX Rousseau’s continues to reveal his frustration over injurious vocations, among them mine work where the minor has to handle such dangerous materials as lead, copper, mercury, cobalt, arsenic, and sulfur arsenic. It was obviously already known during Rousseau’s time that work with these materials could be dangerous. In *Reveries* he also expresses his dislike for the dangers of underground mining compared to peasants and shepherds who work in the fields and meadows.²¹⁷

Rousseau claimed that nature has predestined humans to be healthy (2nd D). Civilized life is, therefore, not in order with nature, and instead makes humans rundown and sick. It is not only humans that suffer from civilization. Domestic animals are in even worse condition than wild animals. But this is not easily cured; everywhere, both civilization and comfort are increasingly required or demanded (JNH). When Parisians go to the countryside, they live the same life as in the city, thus actually bringing so many utensils and servants that one could say they take all Paris with them. Rousseau concluded that “they never know but one manner of living, and are ever bored with it” (JNH, p. 493).

Rousseau found humans superior to other animals, but humans have moral duties towards animals and do not naturally eat meat. In *Notes V* and *VIII* in the 2nd *Discourse* Rousseau attempts to prove that humans initially are vegetarians. Rousseau uses the shape of the human teeth and the alimentary canal as evidence, but also draws upon testimony from narratives of both Ancient and recent voyages. In *Émile*, he also recommends vegetarian food for children. Through the ages many others have tried to prove the same, using similar arguments. Plutarch²¹⁸ (trans. 2007), for example, ironically states that humans would be capable of catching animals with their bare hands and eating them raw if they were carnivores. Unique to Rousseau’s claims is

²¹⁷ This was before chemical fertilization and pesticides became common.

²¹⁸ Plutarch lived about 45-125 AD. In Swedish language Plutarch is called *Plutarchos*.

that he thought that humans probably could have stayed in the state of nature if they would have eaten only vegetables, as he regarded vegetarians as more peaceful than carnivores. So, we could say that, according to Rousseau, it was not the apple, but spilling the blood of other animals that caused the Fall. However, he most certainly thought that humans had no other choice the moment this habit was born.

5.6 Nature for Worship

In Classical Greece, in Hellenistic Greece, and during the Roman time there were traditions of both purification and concentration of the soul before contact with the gods, but also when encountering the truth (Foucault, 2005). Other techniques were withdrawal from the world into one's self to avoid sensations and disturbance, and practicing the endurance needed to bear hardship and resist temptations. When Rousseau wanted to meditate or otherwise withdraw from society he went to natural sites. He carried out both his reveries and active purifications of his soul on long wanderings in the countryside, and he tried to encourage others to engage in more walking, as well (see, e.g., E). But he could also stay motionless in a drifting boat (RSW) or dream under a tree (1st D). According to Plato (in *Alcibiades*, 132b-133c) to know one's self, one needs to look in a mirror. In a similar vein, Rousseau writes:

Now our mind is like the eye that sees everything and does not see itself at all, unless it is by reflection when it looks in a mirror. The secret for knowing oneself and for judging well about ourselves, it is to see ourselves in others. (UC, p. 3)

Plato even stated that the best mirror is the divine element in another's eye, but Eusebius of Caesarea²¹⁹ said that one needs to look into a brighter mirror, one that is better than one's own eye in judging the quality of the soul, and this mirror is God (see Foucault, 2005): only God gives wisdom (*sōphrosunē*). But the Stoics and Cynics maintained that when the soul contemplates itself, it participates in divine reason and recognizes both its own divine nature and the divinity of its thoughts (ibid.). Rousseau's best divine mirror was the natural world, the site that reveals the existence of God. For him the natural world showed order and was beautiful, a harmonious entirety built on reason. "The greatest ideas of the divinity come to us

²¹⁹ The renknowed Church Father Eusebius of Caesarea lived c. AD 263–339.

from reason alone. View the spectacle of nature, hear the inner voice. Has God not told everything to our eyes, to our conscience, to our judgment?” (E, p. 295). Rousseau’s epithet “the hidden language of nature” is interesting to compare with Demetrius²²⁰ who distinguished between useful knowledge (that affects human existence) and un-useful knowledge (about the external world). Demetrius argued that nature clearly exposes all things that can make humans better. What humans need to know is that they have nothing to fear from each other or the gods and that the world is the common dwelling place of all humans. This knowledge can transform the subject and generate the individual’s *ethos* or mode of being in ways that are more important than ornamental knowledge which brings only cultural pleasure. Real knowledge affects all of the human existence (Foucault, 2005). So according to both Rousseau and Demetrius, nature shows humans what they need to know. Like the Epicureans and the Cynics, Rousseau searched in nature for knowledge that could transform and improve human existence. Knowledge of nature and of the self was not separate, but linked so that self-transforming knowledge was born in the interaction between knowledge of nature and knowledge of the self (ibid.). The hidden secrets could be revealed for those who were ready to search inside themselves.

Rousseau saw the natural world as a proof of God’s being. God was male while nature was female (Mother Earth) (see, e.g., E, LF), he felt the presence of this mother: “and the countryside itself would have less charm in his eyes if he didn’t see it in the attentions of the common mother who takes pleasure in adorning the dwelling place of her children” (RJJ, p. 114). God, the male, reveals Himself through his work, the female nature.

I perceive God everywhere in His works. I sense Him in me; I see Him all around me. But as soon as I want to contemplate Him in Himself, as soon as I want to find out where He is what He is, what His substance is, He escapes me, and my clouded mind no longer perceives anything.²²¹ (E, p. 277)

While Rousseau had to struggle all his life with the choice between solitude and social life, nature was a retreat back into his self, a place where he felt safe and

²²⁰ Demetrius was a Cynic philosopher and friend of Seneca.

²²¹ In OC IV the pronoun is also *he*, but not with capital letters: “J’apperçois Dieu par tout dans ses œuvres; je le sens en moi, je le vois tout autour de moi, mais sitôt que je veux le contempler en lui-même, sitôt que je veux chercher où il eût, ce qu’il eût, qu’elle est sa substance, il m’échappe, et mon esprit troublé n’apperçoit plus rien » (OV IV, p. 581).

whole; a place to briefly pause and think without distraction. Nevertheless, he did not regard solitude as the most natural or optimal way of being, but would have preferred to share time with dear friends and beloved (RJJ, see also JNH). For a sensitive person, however, it can be easier “to live alone in a desert than alone among one’s fellows” (RJJ, p. 118). He saw contemplation as a tool for the soul to find inward joy, since every human is determined to be happy, although other people try to destroy that happiness. Especially late in his life, nature was his domicile. In *Reveries* he says that the hours he spends alone and meditating are the hours he is his own master and what nature meant him to be. Nature is the truest human element. When merged into the natural world, humans are sufficient in themselves, like God.

“I feel ecstasies and inexpressible raptures in blending, so to speak, into the system of beings and in making myself one with the whole of nature” (RSW, p. 61). In the previous chapter I described Rousseau’s meditation that resulted in the conclusion that “I exist and I have senses through which I receive impressions.” This was not the final end of the vicar’s meditations; he went on and thus I will now continue to describe those further reflections. The vicar had carefully chosen the time and place to make his speech to the young Rousseau (the author here is split into two persons: the vicar and his young listener). This took place on an early summer morning on a hill above the river Po. Probably not coincidentally, I immediately got the same impression as Brome (1963) that this situation has a resemblance with the Biblical ‘Sermon on the Mount’²²² (in Matt. 5-7), but it can also be read allegorically as a way of taking a detached position and looking objectively at oneself, or even a way of observing one’s self in Mother Nature.

In the distance the immense chain of the Alps crowned the landscape. The rays of the rising sun already grazed the plains and, projecting on the fields long shadows of the trees, the vineyards, and the houses, enriched with countless irregularities of light the most beautiful scene which can strike the human eye. (E, p. 266)

It is a scene filled with sentiment and strong admiration for the glories of nature. Broome compares the whole story with the Fall and Redemption, as the vicar’s profession (declaration of faith) is preceded by two stories where both the young boy and the vicar confess their earlier immoral living. The vicar’s²²³ meditations had

²²² In many cultures mountains are seen as a link between heaven and earth (e.g., Næss, 2002).

²²³ The vicar is the one who utters the central arguments in this text, so I will let him speak instead of the author himself (although I already said that I see him as Rousseau’s alias).

hitherto revealed for Rousseau that he exists and has sensations. And further, he has the power of mind that collects his sensations and by which he compares sensations. He is unsure whether to call this power “attention” (*attention*), “meditation” (*méditation*), “reflection” (*réflexion*), or something else (E, p. 271; OC IV, p. 573). But this power is in him and not in things perceived and it forces him to react; but the next step, acting on this reaction, is up to him. This means that he not only has the capacity for sensing, but also an intellect that can act purposefully. He has now proved that two forces act upon human beings; one of them is out of their power to handle, the other is not. Humans have the free will to choose. In contrast, the vicar is unsure whether other animals have this ability. Rousseau has said elsewhere that there is some difference between humans and other animals in this respect (e.g., 2nd D), but he is definitively sure that inorganic matter cannot move without any external cause. In *Reveries* he uses these words:

I see nothing in any animal but an ingenious machine, to which nature hath given senses to wind itself up, and to guard itself, to a certain degree, against anything that might tend to disorder or destroy it. I perceive exactly the same things in the human machine, with this difference, that in the operations of the brute, nature is the sole agent, whereas man has some share in his own operations, in his character as a free agent. The one chooses and refuses by instinct, the other from an act of free-will: hence the brute cannot deviate from the rule prescribed to it, even when it would be advantageous for it to do so; and, on the contrary, man frequently deviates from such rules to his own prejudice. (DPE, p. 87)

Thinking beings act, reason, judge, and choose and, therefore, they exist, but these abilities are not possible for the other ‘things’ of nature (E). The universe is ordered in determinate form as regulated by the natural laws. The vicar continues pondering about why non-human matter moves and who or what set forth these movements and give them direction. The vicar is convinced that the natural state of an inorganic object is stationary and it does not act until somebody acts upon it. Then, he examines the difference between acquired and voluntary motions and concludes that voluntary motions exist, and he takes the movement of his own arm as an example because the arm belongs to a person who has free will. Nevertheless, the natural state of other matter is a state of rest lacking power of its own. Something or somebody must have put such bodies in motion, he decides. Such movement thus depends on some external cause, as these bodies cannot move of themselves; thus, there must be a will that starts the universe and puts the natural world into motion. And if a will is the

motive that moves matter and if this motion, in addition, follow rules about such movement, there must also be a guiding reason. Without understanding how everything works, the vicar perceives all nature as a system where all its parts function in harmony.

I do not know why the universe exists, but that does not prevent me from seeing how it is modified, or from perceiving the intimate correspondence by which the beings that compose it lend each other mutual assistance. I am like a man who saw a watch opened for the first time and, although he did not know the machine's use and had not seen the dial, was not prevented from admiring the work. "I do not know," he would say, "what the whole is good for, but I do see tht [sic] each piece is made for the others; I admire the workman in the details of his work; and I am quite sure that all these wheels are moving in harmony only for a common end which it is impossible for me to perceive. (E, p. 275)

The perception of the natural world is not enough to grasp the whole entirety of the 'creation' and, thus, there has to be an intellect²²⁴ behind all things, according to the vicar. Unless prejudices abandon the conception, the evidence for this manifest harmony appears through "our inner sentiment"²²⁵ (ibid.). In this concord all species are distinct and ordered to serve each other and to coexist as each other's means and aims. These thoughts of Rousseau were not unique, and they correlate with later ideas about ecosystems.²²⁶ This complete plan cannot be caused by chance, with intelligent creatures coming into being as a mere coincidence. There has to be an independent will that moves the universe and orders all matters, and the vicar calls that being God. The vicar thus claims that it is not the task of humans to understand what God is.²²⁷

The vicar's next step is to find out his own relation to God. The first thing he makes clear is that human beings are the highest of all creatures; they are the ones who can understand all the inter-relations and interactions of the natural world and relate them to themselves. They are the ones who are next to God. However, when the vicar starts to consider human life, he is no longer filled with admiration. What he sees around him is total chaos. Humans struggle between two forces: one leads them towards eternal truths and justice while the other makes them a slave of their own senses and desires. This conflict makes him wonder:

²²⁴ Cf., the current arguments about *Intelligent Design*.

²²⁵ In French "le sentiment intérieur" (OC IV, p. 579).

²²⁶ Ecosystem is a concept for natural systems where living (biotic) and nonliving (abiotic) parts interact like a sea, a forest, a desert, etc.

²²⁷ I might need to point out that Rousseau lived before Darwin.

I said to myself: “No, man is not one; I want and I do not want; I sense myself enslaved and free at the same time. I see the good. I love it, and I do the bad. I am active when I listen to reason, passive when my passions carry me away; and my worst torment, when I succumb, is to sense that I could have resisted.” (E, p. 278-279)

Humans do not need to search for hell beyond death; it resides already on earth in evil hearts. It is their unlimited desires that are the roots of evil. The vicar categorically protests against materialistic theories that do not believe in a human soul and accuses materialists of neglecting their inner voices. He states that no other creatures are active in the same sense as are humans, who have the power to choose whether or not they want to follow their consciences. And their inner voices rule over their decisions, although they are not always capable of acting in accordance with their wills. They are free because of their remorse but slaves because of their passions. Their freedom disappears if they neglect to listen to their consciences when they act wrong. Human intelligence is the power to choose and judge and judgment rules their will. The ability to judge is an intrinsic quality. One’s primary choices are those that are good for one’s wellbeing. Humans are by nature able to sense their immediate needs. Without opportunities to make their own choices, God would have made humans stupid, and humans thus suffer when they make bad choices and misuse their abilities. It is their greed that leads to human ruin. Human life is only a half a life if they neglect their souls and only follow their immediate desires. The fact that humans have free will makes them responsible for their actions, and their vices cannot be blamed on divine providence. But Rousseau argued that individuals cannot disturb the general world order by abusing their freedom. He did not imagine how much humankind would eventually disturb the natural world when he wrote: “The evil that man does falls back on him without changing anything in the system of the world, without preventing the human species from preserving itself in spite of itself” (E, p. 281). Rousseau seemed to believe that humans could neither harm the survival of other species nor extinguish all of humankind. This was long before nuclear weapons, climate change, and other threats to the fate of humanity.

Good humans, according to the vicar, are good towards their kin, and God shows his goodness when he upholds that harmony. The vicar does not mention human behavior towards other creatures. It seems to primarily be God’s task to watch over them. God is justice; injustice is the fault of humans. There is a gap between the conscience, the true human leader, and desires that are ruled by instinct. Humans

need to listen more to what their conscience tells their hearts than to the desires that inform their senses. When humans are good they are happy with themselves, while evil humans try to flee from themselves and cannot enjoy life anymore; mocking laughter is their only pleasure. All humans, regardless of when and where they live and what faith they worship, have an intrinsic capacity for justice and virtue, and that capacity is their conscience, according to Rousseau. The truth is written in the humans' hearts; but they have to learn to distinguish between attained ideas and inner feelings because feeling comes before knowledge. "To exist, for us, is to sense; our sensibility is incontestably anterior to our intelligence, and we had sentiments before ideas"²²⁸ (E, p. 290). Humans have sentiments that suit their nature and these sentiments are innate. By "feelings" the vicar means love for one's wellbeing, fear, pain, fear of death, and craving for comfort.

The conscience is a product of humans' relationships to themselves and to their fellows (E). Yet, to know the good is not the same as to love it; when humans learn about goodness²²⁹ their feelings lead their conscience to seek it. It is their conscience that makes humans godlike: without a conscience they are almost like animals. Even if ruled by understanding and reason, they would lack principles and guidance. In this Rousseau criticized the belief that knowledge and reason are the only ways to the truth because studies do not bring about moral conduct. That depends on an intrinsic feeling in the human heart. Virtue is more than love of moral order; virtue is moral conduct. The difference between good and evil is that the good accepts the divine order and cares about the whole of mankind, but evil arranges an order in according with its own will. Why do all humans not follow their conscience if it subsists within everyone? It is because conscience speaks the forgotten language of nature, says Rousseau. To become able to bridge the gap between knowing the good and acting rightly, humans need education.

To summarize Rousseau's religious thoughts: God started the movements of nature. He makes Himself evident through the intelligent comprehensiveness of his system, the whole natural world. Humans cannot completely understand God and how all things are arranged. They are not intelligent enough for such speculations. When humans have tried to recognize God they have made him in their own image. Humans are closer to God than all other creatures, and the natural human being is

²²⁸ In French: "Exister pour nous, c'est sentir ; notre sensibilité est incontestablement antérieure à notre intelligence, et nous avons eu des sentimens avant des idées" (OV IV, p. 600).

²²⁹ In French "le bien" (OC IV, p. 600).

closer to God than are civilized humans. Even if humans share God's virtue, they have their own will and can choose virtue or vice. The closer their will is to God's, the more natural it is, and the more virtuously they act. The virtuous voice of God speaks through the human conscience, and: "He has given us reason to discern what is good, conscience to love it, and freedom to choose it" (JNH, p.561). To serve God is not primarily a question about thinking and talking, not even about praying. It is about actually fulfilling one's duties towards Him.

When reading *Savoyard Vicar* it becomes obvious that Scott (1992/2006) is right when he calls Rousseau's view of human nature and the development of humankind a comprehensive picture of what it entails to be a human being. In *Savoyard Vicar* Rousseau develops his thoughts about natural religion and this is a text that, according to Rousseau, was an extremely crucial summary of his philosophical thoughts (see RSW). I also find the text to be an overview of the ethics I described earlier in this chapter. In a letter to Voltaire, Rousseau depicts God as totally impersonal. God's concern is the whole world and its entire species as a whole. He is not concerned with particular individuals. The order of the whole is the most important and thus the survival of the species comes before individual lives. God has given us life but does not care about how each one of us spends her or his life. Humans are good because they share in a totality that is good due to the goodness of its providence. Rousseau is apparently more interested in how humans treat each other and the natural world than with the impressions they make on God (LV). The human aim is to throw away the veils of civilization and become more natural and thus more godlike. Rousseau thought that he had reached that state at the end of his life, when he writes in *Reveries*: "[H]ere I am, tranquil at the bottom of the abyss, a poor unfortunate mortal, but unperturbed, like God Himself" (RSW, p. 6). He was alone and no longer cared about worldly matters; he wanted to spend his last day conversing with his soul. The meditations during his daily walks were times when he felt "I am fully myself and for myself, without diversion, without obstacle, and during which I can truly claim to be what nature willed" (ibid., p. 9).

Cooper (2004/2006) argues that Rousseau extends his being and overcomes "civilized self-consciousness" in the stories he tells in *Reveries*. On the one hand, Rousseau identifies with the harmony of nature and meditates and dreams in order to lose his self amidst nature. He thus becomes sensitized and experiences the divine system. He feels one with nature; he becomes a part of something greater than his self. On the other hand, this is a satisfaction with self in the very moment, being what

one is and nothing more; it is a kind of narrowing space and time (ibid.) and of existing in the very moment. Nevertheless, in *Émile et Sophie* Émile remembers what he learned as a child: not to dream about doing one thing while he already is occupied with something else, because this is to be nowhere. He worked, therefore, during the day and dreamed in the evenings.

According to Scott (1992/2006), Rousseau speaks about the first providence metaphorically as a picture of a positive character, nature, in contrast to the evils of society created by humans. In *Letter to Voltaire*, he describes God as the most perfect, just and wise being that is possible, and as something totally different than what the priests make of Him (LV). God is an ideal of the highest morality, something to try to live up to: He brings hope (ibid.). Viewed in that light, Rousseau posed an alternative to Hobbes' negative pictures of humans as initially evil and of Locke's social order where human rights are prior to human duties. Rousseau's picture, then, is a reversal of the image of a life where individual desires promote a steady development to the visualization of social change of a more responsible character. But God is not nature; He is its animator, the spirit that holds up the world (E). Rousseau distinguishes between the religion of the state and that of the individual, and the latter has no altars, rituals, or rites. Christianity as a spiritual religion is problematic; it does not bind citizens firmly to the state and is more likely to be in opposition to society and the social contract. If religion brings about faith in an afterlife, it provides no striving for better conditions on earth: despite their troubles and disorders, everyone can hope for being rescued from their slavery the day they die.

Rousseau does not first and foremost suggest a state religion, although many interpret the last book in the *Social Contract* as doing so. What he writes is that a state can have a common religion if that religion is free from dogmatism and upholds the moral realm. But he also declares that the Sovereign can set up "a purely civil profession of faith of which the Sovereign should fix the articles, not exactly as religious dogmas, but as social sentiments without which a man cannot be a good citizen or a faithful subject"²³⁰ (SC, p. 65). This is more a question of civil morality than of institutional religion. However, some form of religion can be beneficial to

²³⁰ "Il y a donc une profession de foi purement civile dont il appartient au Souverain de fixer les articles, non pas précisément comme dogmes de Religion, mais comme sentimens [sic] de sociabilité, sans lesquels il est impossible d'être bon Citoyen ni sujet fidelle [sic]" (OC III, p.468).

maintaining social harmony. According to Rousseau, a society needs a few simple common rules. Among them are:

[t]he existence of a mighty, intelligent and beneficent Divinity, possessed of foresight and providence, the life to come, the happiness of the just, the punishment of the wicked, the sanctity of the social contract and the laws: these are its positive dogmas. (SC, p. 66)

He mentions one negative dogma, intolerance, which can occur both in civil and religious forms and “which is a part of the cults we have rejected” (SC, p. 66). All religions are to be tolerated as long as they do not threaten the duties of the citizens (SC). Thus, he did not deny the afterlife, but he did not hold it as the main goal of life. For Rousseau, religion should not be based only on rationality; he emphasized the need for emotional involvement. But Edelman (2004) suggests that Rousseau’s religion only served the pragmatic political goal of shaping unity in the state based on shared devotion. He may be right. In *Letter to Franquières* (p. 266-267) Rousseau claims that “to root out all belief in God from the heart of man is to destroy all virtue there” and he argues that removing God would lead to more evil. However, when Rousseau praises nature and asks how something that well-organized could be possible without a divinity, it sounds as though he believed in God. Moreover, in *Savoyard Vicar* he keenly objects to atheism. Again we encounter a paradox, and a picture that is all but black and white.

5.7 Answers to the Inquiry

The main question studied in this chapter is *What were Rousseau’s ethics in relation to nature?* I will deal in order with the sub-questions and then return to the main problematic.

1. *What is the ethical substance of Rousseau's conclusions about the moral conduct of human beings?* According to Rousseau, all individuals have to search for what is natural inside them and listen to their own hearts. Rousseau saw always a conflict between *amour-de-soi*, the natural love towards oneself, and *amour-propre*, the socially created self-relation. The feeling for the natural, instinctual *amour-de-soi* is contaminated by ages of civilization and the genuine human being is hidden behind a thick and multilayered veil. We do not know who we are; we think we know, but

are not sure (see E), so our challenge is to find our innermost being. For adults who are focused on their lifestyles and the values of their society, the search for genuineness is a difficult task. Through his own example Rousseau wanted to show that an individual has to consider life as a constant struggle with the outer world (society) and with the inner temptations that society promotes. Humans are born good and have free will to choose the good rather than evil. Therefore, acting good is natural but to become virtuous humans have to choose the good as a duty. “There is no happiness without courage nor virtue without struggle. The word *virtue* comes from *strength*” (E, p. 444).²³¹ If happiness came without struggle it would not be so valuable. Goodness lasts only as long as one takes pleasures in it, but being virtuous demands more effort. Only God is virtuous without struggle, while humans become free when they become their own masters. To master their passions, humans need to learn to know their limits (E).

2. *What modes of control (subjection) do humans have to undergo to live in tune with their human nature, according to Rousseau?* According to Rousseau, it is important to stand up for what is natural and morally right and not try to hide between conventions and common rituals. He asked for moral behavior, not for ethical rules that lack practical implications. In this respect he had to struggle and thus made himself uncomfortable in most groups. Always trying to follow one’s own ethical rules, thus talking and acting as he felt was right, was met with disdain. When he acted in accordance with his beliefs, the reaction was the same, and when he tried to compromise or failed to follow his principles he was accused of being inconsistent. The only way out was withdrawal and non-participation. Nevertheless, Rousseau found that the best way for humans to feel comfortable and at ease with themselves was to act in accordance with their own inner nature, without comparing themselves with others or trying to be more than they actually are.

3. *What forms of conduct or manners do individuals have to choose in order to transform themselves into more 'natural' humans, according to Rousseau?* At the age of forty, Rousseau decided to live a more natural life, to give up struggling with worldly matters, and to start to live day by day. “I forsook the world and its pomp; I renounced all finery: no more sword, no more watch, no more white stockings, gilding, or headdress, a very simple wig, a good coarse cloth garment, and, better than all that, I eradicated from my heart the cupidity and covetousness which give

²³¹ The italics are original.

value to everything I was forsaking” (RSW, p. 20). He resigned his post, moved to the countryside and started to make his own living by copying music. From that moment he also spent considerable time alone in natural settings. But, this change was not only external; it was also a moral awakening that he calls “a great revolution” (ibid.): “I eradicated from my heart the cupidity and covetousness which gave value to everything I was forsaking” (ibid.). He began to feel the absurdity in humans’ judgments; he also felt he could not agree with the atheism that many philosophers preached, which he was not even sure was their own belief. Rousseau wanted dearly to become more aware of his own beliefs; that is, to know himself better. At this stage he undertook the meditations he describes in *Savoyard Vicar*. Even though his ideas were controversial and caused him many doubts, he remained faithful to them for the rest of his life, and during this period of revival he struggled to live virtuously: “I will be happy if by the progress I make with myself I learn to leave life not better, for that is not possible, but more virtuous than I entered it!” (RSW, p. 27). Rousseau not only sought a more natural moral conduct in his own life, he also wanted provide a model for others. Sometimes he thought that it was possible for others to free themselves of prejudices and to develop their moral judgments through self-training. In *Reveries* he even states that one day his thoughts would create a revolution among humans “if good sense and good faith are ever reborn among them” (RSW, p. 23).

Rousseau faced the difficulty that people trying to live in accordance with nature struggle with today, namely how to follow rules that are not commonly followed in society; that is, the difficulty of choosing the most natural lifestyle while also living together with the other members of society who follow other rules. He was aware of the conflicting multiple roles humans struggle with; that an individual is not one, but many roles. These roles change from context to context and when acquiescing to the will of others, individuals start to neglect their own inner wants. Given the variety of other wills and the diverse forms taken by one’s own will, the whole of life becomes a struggle between different wills. Anyone actively involved in environmental protection and struggling to choose an environmental friendly lifestyle has had to deal with this dilemma. In all his writings Rousseau tried to stimulate others to act more naturally; that is, to live modest lives without superfluous luxury, lives where the present need for survival takes precedence over focusing endlessly on extending being by means of unnecessary possessions and presenting false, unnatural façades. However, he also saw the ongoing human conflict between being free and being social, since his personal dilemma was always one of conflict between solitude and

social life. Society both corrupts and awakens responsibility and compassion. Solitude increases freedom, but life is not worth much without friendship and love.

4. *What should the ethical goal be towards which individuals should strive in actualizing their moral selves, according to Rousseau?* In Rousseau's opinion humans are born with free will. Everyone has a free choice to join the race or step aside. He was convinced that he had been born uncorrupted then subsequently confronted by the dishonesty and depravity of other people (RSW, p. 55): "If I had remained free, obscure, and isolated as I was made to be, I would have done only good, for I do not have the seed of any harmful passion in my heart." The desire to extend one's being can, if done negatively, result in mastery over others. In a positive sense it can lead, instead, to self-mastery. With the goal of becoming satisfied with one's own being, humans can strive to carry out a virtuous life. Cooper (2004/2006) interprets this struggle for goodness as one part of the self taking power over the other, where the good and true self takes the leading role. Cooper's ideas are reminiscent of Plato's description of the struggling parts of the soul. Rousseau claimed that he had searched for knowing his own being more eagerly than anyone else. Instead of studying the natural world to know more about it than others or speaking knowledgeably about human nature, he wanted to know himself. The aim of his writing was not to become famous; instead, he sought to widen his own sagacity. (RSW) But the extension of one's being was also a process of perfection; a matter of becoming ever-more godlike and fulfilling one's role in society, in the greater totality of Mother Nature (E). Civil society (*la société civile*), with all its obligations and duties, definitely did not suit Rousseau. Therefore, as an old and disillusioned man, Rousseau stepped apart from society and chose solitude, and the only option he offered Julie was death:

The land of illusions is on this earth the only one worth living in, and such is the void of things human that, with the exception of the Being who exists in himself, the only beauty to be found is in the things that are not. (JNH, p. 569)

Nevertheless, for example in *Émile*, Rousseau offered a more optimistic and hopeful vision, a vision he nevertheless rejected in *Émile et Sophie*. Although his hope was fragile, he believed in (or at least hoped that) some degree of human perfection moved towards both more enlightened human beings and better human societies, at least temporarily. This is noticeable in his visionary works, although he often wrote as though steered by rage.

5.8 Conclusion

The main question in this chapter is: What were Rousseau's ethics in relation to nature? Before I start to conclude the crucial elements in Rousseau's ethics, I have some pivotal points to draw. Firstly, when I called this chapter "Rousseau on nature and ethics," I wanted to emphasize that nature is the foundation of Rousseau's ethics. Secondly, "nature" and "natural" are two concepts that arise from the same idea: anything that is in a state of nature is natural, so nature is much more than the natural world (a physical unity); it is also a state of being that is innate for all living creatures and the entire universe. Thirdly, the totality that is Rousseau's concept of "nature" has a clear, divine dimension that cannot be neglected in the interpretation of his ethics. Okin (1979/2006) blames Rousseau for using the concept of "nature" selectively to depict a one-sided view of a state he found good for humankind and recommends that Rousseau's views have to be read critically.

As mentioned earlier, no matter how beautifully Rousseau wrote about the state of nature, he never thought that a return to this blessed hypothetical state was a realistic option. Whether we want to or not, it seems inherent in human nature to progress, although the speed of such progress may vary according to environmental circumstances that humans cannot totally ignore. There are, of course, many points in Rousseau's thoughts that cannot be taken seriously, but also many statements and recommendations that are as topical today as they were in the 18th century. Scott (1992/2006, p. 227) points out that the most fundamental question is not if Rousseau was right about human nature, but that "he forces us to rethink how the essential questions of political theory are related." In general, contemporary political theory is not interested in discussing aspects such as justice, fairness, and progress in relation to human nature (*ibid.*). But, for Rousseau these components were definitely allied and thus they need to be included in contemporary discourse about sustainability. Rousseau had an ambivalent relation with "reason"; he saw it in both a positive and negative light. For him reason without compassion was dangerous (*cf.* Næss, 2002). He argued that humans need passion in order to see and react, to bother about the welfare of others, and about the course of the world. He wanted people to care about each other, not just strive for their own advantage, and to take close note of what happens in their immediate surroundings. He never understood how people could cry when watching tragedies at the theater but not react to real misery in their neighborhood (E). For him, ethics was a practical endeavor, and he wanted to teach

people to care more about the happiness of people next to them than about abstract virtues.

Rousseau is unfairly associated with “back to nature” (see the previous chapter). His intention should instead be described as a summons for everyone to live in accordance with their inner nature. “Let us return to ourselves,” was what he meant (E, p. 287). He suggested that those who know how to speak can attend to big issues, while most humans are more suitable for concrete actions. However, concluding that Rousseau’s point was that we can relax and leave ruling and investigation to the brilliant intellects would be a misreading that misses his ironical point. To the contrary, he encouraged vigilance towards discussions of important issues. Even if Rousseau agitated for genuineness and simplicity, he did not suggest blindness and foolish trust. He never rejected reason as a crucial drive, only corrupt reason; he saw reason as a means towards the truth (Kelly, 2001). But, according to Rousseau, it is not possible to reach truth unthinkingly or merely theoretically, because truth is not an impersonal construction: it is rooted in the human mind. Truth is to be grasped by love and tenderness (ibid.); science without virtue is worthless. “His constructive impulse was not a longing for an Eden to complement a self-engendered vision of hell, but to delineate a human world fit for human life, where paler grey may, with good fortune, preponderate over darker” (Dent, 1988, p. 7). What Rousseau wanted so much was a world where individuals were recognized by others as ends worthy in their own sake, not as means to another’s wellbeing. Society should be an agreement on equal terms, not a matter of hierarchical control. Rousseau claims that politicians concentrate their efforts on money and consumption. They value people like cattle and only see their value in what they consume (2nd D).

In Rousseau’s opinion, humans are parts of nature in many ways and their original state is natural. On the other hand, he wanted humanity to stand for naturalness and moral conduct. For him, caring about nature was caring about what is natural, and it definitely required more than words; it was to become more natural through a kind of self creation. A natural relation to self is living in accordance with what is intrinsic for human beings that is in accord with nature. It is to free oneself from unnatural desires and, thus, is about the supremacy of self over one’s self that is self-management (cf. Foucault, 1985, 2005). Rousseau was not a mere subject considering and studying objective reality. He was a living being with a philosophical system and a burning desire to live his philosophy himself. Yet, he also cared about what today we call the “natural environment.” But, for him, the natural world and

humans were joined, not separate. He saw humans within nature and nature within humans.

Rousseau thus never gave up the idea that human beings are originally good, but at the end of his life he was wounded and upset by all his own unsuccessful relationships. Rousseau felt that he had been the victim of other's *amour-propre*. He was an extremely sensitive person and never could forget all the injuries he had suffered. I do not want to speculate on whether this was an infirmity he suffered; such a conclusion would too easily allow ignoring the powerful statements about humankind that Rousseau offered. He presented a vision of a new world inhabited by a new kind of human and that vision was, in one way, overwhelmingly profound and, in another, completely realistic and understandable. Starobinski (1988) is nonetheless sardonic about Rousseau's fascination with the Platonic distinction between appearance and reality. However, Rousseau followed Plato and shaped contrasting pictures: on one hand, pictures of the existing and what he called "corrupt" society and, on the other hand, visionary and virtuous pictures. Rousseau is one of the few who have dared to take the veil from his face and become a truth teller. He was definitely aware of the contrast between the real world and visionary ones, and pointed out that while the former is limited, the latter are infinite (E). Even though he could imagine the virtuous life, it was not within reach for him any more than for others. Rousseau was convinced that he had not purposefully harmed other people, with exception of some stupidity in his youth; he was, therefore, certain about his own goodness but not always of his virtuousness (e.g., RSW.). His shortcomings become obvious in his autobiographical *Confessions*, *Reveries*, and his many letters. He had struggled and tried to act virtuously, and he was not always aware of his own limitations and weaknesses. However, sometimes he was extremely conscious for that he had put desire prior to duty,

[F]or there is none at all [virtue] in following our inclinations and in giving ourselves the pleasure of doing good when they lead us to do so. But virtue consists in overcoming them when duty commands in order to do what duty prescribes, and that is what I have been less able to do than any man in the world. (RSW, p. 51)

Rousseau realized how difficult it is to act virtuously against one's own will. A habit of virtue promotes dutiful action (RSW), but one of Rousseau's main problems was how to bridge the gap between his theories, his system of thoughts, and reality (see

also Broome, 1963). His fascination was an ideal world where all humans are good and act virtuously; no inflamed *amour-propre* exists in this utopian world, only peaceful *amour-de-soi* and decent *amour-propre*. Where inflamed *amour-propre* is present it drives our own and others' passions into collision and soon loses its correct direction. Individuals may be dissuaded from acting virtuously if others take advantage or mock them because of their virtue. Virtuous actions are nourished by the constructive recognition of self, whereas negative recognition alienates people from themselves, so they see themselves as strangers (RSW). One way to avoid indignation and insult is to withdraw and be alone, to fly away on the wings of imagination from the evilness of other people. But, Rousseau also offered other alternatives: a life of mutual cooperation in constituting a more virtuous and happy society that is promoted by an appropriate education.

Whether Rousseau was more gifted than others, he unmistakably believed that he had a mission to make his ideas public (see Broome, 1963) and most of his writings have some kind of instructional tone. In *Émile*, Rousseau states that he was not suited for practical instructional work as a tutor, so instead of doing the work himself he had to teach others what ought to be done. Writing books was his way of instructing the public; teaching others new truths and correcting their false opinions (see IM). A sharp pen is also a political tool, and his writing tone is often somewhat mean-spirited. One of Rousseau's writing techniques was the use of paradox. It is easy to blame Rousseau for contradictions between his actions and ideas, but maybe it is our own cultural background that makes us look for contradictions, splitting "nature" and other concepts, and always finding some incoherence in Rousseau's arguments. Maybe it is the human situation, instead, that is so contradictory. Rousseau examined himself and found that true happiness rests inside each of us, and to be free is, therefore, to be independent of other people's opinions. The problem was that not even he could neglect other peoples' judgments. Broome (1963) accuses Rousseau's attempts at living in congruence with his own system as representing a lie. I would not agree with this argument because I believe that Rousseau really tried; but he was both alone in his attempts and trapped in his own time. He wanted so eagerly for humans to be good or at least to try to become better, but he realized that his theoretical project was doomed to failure. It has always been easy to discredit those who fail when they try to perform what others know is right but do not have courage and will to attempt (see Irvine, 2006).

Rousseau's ethics encourage reflections on what it means to be a human being and under what conditions we need to live our life if we want to be happy. Moreover, he can help us realize that even if the human need for self-satisfaction is infinite, planet earth has a limit and so does acceptable distributive injustice. Rousseau's ethics are connected to governmental affairs and the political claims delivered by Rousseau's sharp arguments are well-worth considering. Rousseau can undoubtedly awaken contemporary considerations about education in relation to nature. In Lévi-Strauss' opinion,

[H]e also restored for us its [ethics'] ardor, burning for the last two centuries and forever in this crucible, a crucible uniting beings whom the interests of politicians and philosophers are everywhere else bent on rendering incompatible: me and the other, my societies and other societies, nature and culture, the sensitive and the rational, humanity and life. (Lévi-Strauss, 1973/2006, pp. 205-206)

In the beginning of the next chapter, I will discuss the art of government. Instead of demanding obedience to the law and earthly or heavenly sovereignty, government uses diplomacy to fulfill its goals. The ruler is thus better off with knowledge about human life more than weapons or wisdom. Instead of maintaining obedience through laws and with the help of military weapons, education becomes an unseen weapon of manipulation. In this situation Rousseau's education becomes paradoxical. The chapter will concentrate on education by employing Rousseau's texts related to education, and it tries to disclose the core of Rousseau's educational theory and the methods he proposed for teaching his ideas to a varied audience. That core entails how to promote perfectibility by fostering autonomy, morality, equality and happiness, and it is definitely not easily done.

6 Nature in Rousseau's Educational Philosophy

The previous chapter dealt with the role of nature in Rousseau's ethics. This chapter will focus on how Rousseau included those ethics in his educational thinking. As previously mentioned, Rousseau saw his thoughts as a complete system. In this system, nature had a significant position and so did education. He saw education as a route towards a better world and thus as an instrument for, or rather a process towards, perfection. This chapter will discuss that process.

The organization of my study of Rousseau's educational theory is similar to that used for my study of his ethical theory. My approach is thus once more a trial of a modified version of Foucault's method for studying ethics by means of history that he developed in *History of Sexuality*, and I have tailored the division I used in the ethical study anew to fit the educational study. To begin with, then, I will briefly describe the stepwise design I will employ in the study of Rousseau's educational thoughts. Yet, I have to suggest that the reader who wants a fuller description of the research should re-read sub-chapter 3.3. Secondly, I will also discuss the texts that served this particular study. Thirdly, I will examine Rousseau's thoughts concerning education, beginning with what he meant about the "natural" education of human beings and of citizens, and then move towards how he wanted to promote humans' relation to the natural world through education, ending up with how humans could be encouraged to develop devotion to God. To sum up: in this chapter I will briefly present the research method, discuss the background and reading sources, and then give a step by step interpretation of Rousseau's educational philosophy and how it relates to nature and what is natural.

6.1 Background, Procedure and Sources

To situate Rousseau's entire ethical discussion in a broader discourse, first I need to provide some brief background. I will do that by help of Foucault and will present a

far-reaching system of government that he called *governmentality*²³² and will introduce how Rousseau contributed to this system. During Rousseau's lifetime, citizens were regulated and ruled by an increasing number of governmental techniques (the section about economy in Chapter Four is also relevant here). There was a rapid development of disciplines concerned with the management of human life, such as health, housing, and migration. The human body became a part of the production machinery. The life of Homo sapiens entered into an order of knowledge and power that measured and controlled the life process. Human biological existence became an economic variable, a factor in production. But, still there was a need for moral regulations.

Governmentality

[P]ower relations, governmentality, the government of the self and of others, and the relationship of self to self constitute a chain, a thread, and I think it is around these notions that we should be able to connect together the question of politics and the question of ethics. (Foucault, 2005, p. 252)

While Rousseau painted the optimal and happy state of nature in terms of a genuine human nature, Foucault presented a provocative picture of a *normalized* society that tries to squeeze all citizens into the same mould. Unbelievably, these two pictures have something in common. How could this be? Because when Rousseau strived for the "natural," he painted a picture of an ideal society and tried to promote the perfection of humankind through education, and thus he participated in the shaping of the 'normal' using the same technique. Society's rules should permeate everyone's entire being.

Nevertheless, let me start with how this normalization takes place. In Foucault's (e.g., 1978, 2000a) vocabulary, the concept *governmentality* entails a tactical ruling by means of knowledge about what needs to be ruled. This understanding is a result of a transformation of the state of justice into the administrative state in the Middle Ages. It leans on a complex form of power consisting of series or systems of processes and techniques. The growing population was governed with the help of statistics developed by the mercantile tradition that had developed the tools for controlling and mapping the life of the population and its labor. From the middle of

²³² The neologism 'governmentality' is a combination of *government* and *mentality*.

the 16th century until the end of the 18th century, a series of political treatises flourished revolving around ‘the art of governance’. The target of governance was multidimensional and dealt with how to govern *oneself*, originally an issue with Stoic tradition, the Christian theme of the *government of souls and lives*, the government of *children* through education, the government of the *family* and, finally, of the *state*. Foucault distinguished two lines in this process: firstly, a political and administrative line and, secondly, a religious line. Of these two courses of action, one leads toward state centralization and colonial administration and the other towards eternal salvation. A major study in this diverse discourse was Machiavelli’s *The Prince*. The book, first published 1513, deals with the leadership of a prince, and it gave rise to many ideas concerning leadership. The governmental task of the prince and his relation to the state had broad implications and inspired discussions about the leaders of the state, the head of the family, the superior of a convent, and the teacher of a child. Of all the possible forms of leadership in a state, three became central: the art of self-government involving morality; the art of governing a family, termed economy; and, finally, the political science of ruling a state. Rousseau contributed to discourse about all three issues. Foucault (ibid.) also connected Rousseau’s *A Discourse on Political Economy* to the establishment of an art of government where the government of the family and all its members is compared to the government of the state:

To govern a state will mean, therefore, to apply economy, to set up an economy at the level of the entire state, which means exercising toward its inhabitants, and the wealth and behavior of each and all, a form of surveillance and control as attentive as that of the head of a family over his household and his goods. (Foucault, 2000a, p. 207)

Before the 18th century, it had already become popular to discuss how to transfer to the state level the art of governing that a father exercised when he governed his wife, children, and servants and tried to increase the family’s wealth. The “family” gradually became more politically interesting because of the possibility of governing the state through its families (Foucault, 1978, 2000a). This involved a shift of thinking from holding the family as a model of government to making it an instrument of governing. At the same time, a new science was born that focused on the relationship between population, territory, and wealth. The target of governing was not only a territory or humans; it was all kinds of ‘things’. These included

wealth, resources, and territories and their particular qualities, such as climate and fertility, and even customs, ways of thinking, health, and so forth. Other than as a resource for human exploitation, nature was not included. The art of government became a matter of ‘political economy’. With this change of focus, the problems of discipline and sovereignty had not disappeared but were still central. What was remarkable in this governing, as Foucault (ibid.) saw it, is that the object of government, the people, formed an active part in the process since they engaged in self-government. Individual freedom thus implied self-government and this freedom became both a result *of* and an instrument *for* state government (Simons & Masschelein, 2006). As expressed in Foucault’s own words, “[t]his encounter between the technologies of domination of others and those of the self I call “governmentality” (Foucault, 1997b, p. 225). By various normalizing methods of measuring, examining, categorizing, and educating this comprehensive kind of government aimed at creating ‘norms’ for modern individuals (see Taylor, 1986). Yet, this governmentality had no face; it was a power that resided in all members of society and reflected their relationships in a way that required all individuals to objectify their own selves (ibid). As stated before, Foucault (e.g., 1997g) used the concept *biopolitics* to describe the fact that the human body became an object for power/knowledge, and its diseases and treatment became a political element as early as the 17th century.

Rousseau’s ethical thoughts and ideas concerning the human nature, politics, education, religion, and many related issues need to be viewed against this background. His answer to this problematic was to offer a critical system in which nature and what is natural are central. But he was also a promoter of the idea of governmentality and his project was to shape an ideal vision of the perfect society. Yet, at the same time, Rousseau’s vision shared some principle features of what was common in the society he wanted to criticize. Education was one exercise of power in any extensive system of governmentality.

Education beyond Childhood and Generations

When Rousseau focused on education, he participated in a discourse along with other 18th century authors such as Locke, Condillac, Montesquieu, Voltaire, H  lv  tius, Diderot, and numerous others. Moreover, like them, he touched on education in

several of his writings, although the main topic was often something else. At a first glance, his varied approaches to the topic may appear contradictory. As an example of how his ideas can seem to strain in opposite directions, in *Considerations on Government in Poland* and *A Discourse on Political Economy* he recommends a state education, while in *Émile, or on Education*²³³ and *Julie, or the New Heloise*, a private education is extolled. Nonetheless, to be fairly judged these diverse thoughts have to be considered in their context and thus understood in relation to the targeted aims of particular writings. In this regard, it is also worth keeping in mind that Rousseau's thoughts about education in *Émile* as well as in other works not only deal with schooling; they deal with the total nurture of humans from birth to adult life and thus involve a primary form of what we now call "lifelong learning." In addition to the role of education in individual lives, he also considered the function of education in the dynamics of state politics and society. Rousseau stressed that children need to study their relation to things, then, when they grow old enough to become moral, they need to study their relation to others, a task that lasts one's entire life (E).

Problematization

The research approach in this chapter is similar to the previously mentioned modification of Foucault's ethical studies. I will study Rousseau's portrayal of an education that makes individuals more natural and thus fit into a natural society, the natural world, and a natural deity. I will also relate these conclusions to the way he tried to fulfill them in his own life. Although in Chapter Three I have already described how I employ Foucault's ethical research strategy to my study of Rousseau's educational thinking, I will give a précis here (see Table 2).

The main question I will address is number III: *What is the role of nature in Rousseau's educational philosophy?* I will try to reply to this third research question using the outcome of the second question (number II, described and answered in Chapter Five) and thus develop new problematic that connect Rousseau's ethics to his view of education.

²³³ In this book *Émile* (italics) denotes the book, and Émile the boy in that story, and I adopt the same principle with the book *Julie* and the character Julie.

1. *What is the essence of a natural education, according to Rousseau?* This is the ‘ontological’ aspect, asking what the main premises are that are the foundation of Rousseau’s ‘education in accordance with nature’. How did Rousseau regulate what education is in relation to other forms of social impact and how, in general, was education practiced at his time?

2. *What did Rousseau believe that education could do to encourage people to adopt particular norms or rules regarding their relationships to nature?* The ‘deontological aspect’ deals with how education can improve human development towards special goals. This question relates to Rousseau’s ideas about perfectibility and is concerned with the goals of education, that, according to Rousseau, should encourage people to act more responsibly or genuinely towards his images of “human nature” and what he thought was “natural”?

3. *Can education promote conduct that is more in tune with nature and, if so, how?* In contrast to the previous consideration of ‘what’ norms concerning nature education should encourage, this ‘ascetic’ aspect concerns ‘how’ to promote self-transformation and purposeful action towards something better. Of interest is the kind of conduct that might lead to a transformation of individuals and society. Another aspect is how to inspire a person to be *willing* to choose what is good.

4. *What are the aims of an education that promotes the development of more natural humans?* The last of the four sub-questions, the ‘teleological’ aspect, plainly asks what Rousseau saw as the fundamental direction of education. Towards what does ‘an education in accordance with nature’ strive? What are its individual, social, and global aims?

Choice of Material

The analysis of Rousseau’s educational theory is based on two books, an essay, and a collection of letters. He wrote three books simultaneously between 1756 and 1761 (Broome, 1963; Dent, 1988) and they were published between 1760 and 1762: *Julie, or the New Heloise* (*Julie*, JNH), *Émile, or on Education* (*Émile*, E), and *The Social Contract* (*Social Contract*, SC). One can assume, therefore, that Broome (1963, p. 50) is right in seeing them as “the outcome of the same surge of creative energy.” Instead of the *Social Contract* that I have already drawn from in the previous chapter, here I will combine *Émile* and *Julie* with a political text that gave birth to the *Social*

Contract, namely the essay *Discourse on Political Economy* (*Political Economy*, DPE). The two books *Émile* and *Julie* and the *Political Economy* essay also all show direct connections to the two discourses (*1st* and *2nd* *Discourses*) discussed in the previous chapter.

In the books *Émile* and *Julie*, Rousseau created hypothetical instruments and utopian versions of life activities that aim at a better society in accordance with what he thought is most natural for humans (even when living in a society). To this end, he describes the education of a child, the organization of family life, parenthood, marriage, friendship, vocational training, and work. In the essay *Political Economy* he draws a picture of a forthright state politics where education is included in its basic economic and political principles. The entire book *Émile* (from which I used the part *Savoyard Vicar* in the previous chapter), is the main source of this chapter. While *Political Economy* and especially *Julie* deal with a variety of issues, I will concentrate my reading of them on the parts dealing with education. The fourth source is a botany dictionary and a compilation of letters on the topic of botany, collectively called *Botanical Writings* (BW). Since Rousseau also discussed education in many other writings, I will use other sources as needed, even some of those I used in Chapter Five, especially the *Social Contract* and *Reveries*. Continuing my practice in Chapter Five, I will try to compare my understanding of Rousseau's education with other scholars who have discussed his ideas. I will start with the main source for the study in this chapter, *Émile, or on Education* that is one of the most legendary books on education ever written in the Western tradition.

Émile, or on Education

Rousseau described *Émile* as a project that took him twenty years of thinking and three of writing (C). He called it the keystone of his philosophical construction (RSW) and “his greatest and best book” (RJJ, p. 23). In *Émile*, Rousseau sketches a thought experiment in the form of a hypothetical educational proposal. He wanted to challenge established educational methods and describe a strategy that follows “the march of nature” and that is “suitable for man and well adapted to the human heart” (E, p. 34). When Rousseau outlines the purpose with his project in the *Author's Preface*, he attacks the contemporary form of learning for being more destructive than educative and states that “the art of forming men, is still forgotten”²³⁴ (E, p. 33).

²³⁴ “(Q)ui eût l’art de former hommes, eût encore oubliée” (OC VI, p. 241). Compare the word “form” with

In the first chapter he writes, “Plants are shaped by cultivation, and men by education”²³⁵ (E, p. 38).

Yet, Rousseau did not write *Émile* to be acted upon word by word; he did not, therefore, write a typical ‘method’ book intended as a practical educational tool, although he addressed *Émile* to a kindhearted mother. In *Lettres Écrites de la Montagne* (Letters Written from the Mountain), Rousseau asserts that his intention with *Émile* was never to describe a method but to outline a new education system for the wise to reflect on (see OC III). However, the book is not only about education; it is “a treatise on the original goodness of man” (RJJ, p. 213) and shows how the initial goodness of humans changes if vice and error are let into their minds. As stated in Chapter Two, he did not deny that one of his great influencers was Plato (see E) and, when reading *Émile*, this becomes obvious.

Indeed, one can ask what kind of book *Émile* is? Actually, there are many suggestions. It is sometimes referred to as a novel (e.g., Kroksmark, 2003; von Oettingen, 2001). Bendixon (1929, p. 73) specifically called *Émile* an “educational novel,” while Goethe (according to Kroksmark, 1989, p. 76) called it “a pedagogical nature gospel” (Wolff’s trans.). Since Rousseau also composed music, Bardy (1996) compares *Émile* with a symphony and depicts the book as “an ocean of ideas about life and the human being.” The book is also described as a “thought experiment” (e.g., Kroksmark, 2003; Johnston, 1999). I prefer to classify *Émile* as ‘a philosophy of education operating in part as a thought experiment,’ and I do not deny that it also has utopian features. The story is grounded on the idea of a better world of tomorrow and pictures an education that could make this dream come true. Rousseau illustrates his educational theories with a thought experiment describing the education of the fictive pupil Émile. This thought experiment is not the center of attention in all chapters of the book, but it is intermingled with his other theories in an interesting fusion.

Because of Rousseau’s complicated writing style, readers might miss important points (see, e.g., Gay, 1966; Vanpée, 1990/2006). Vanpée emphasizes that *Émile* has been reduced to a literary ‘work’, instead of letting the reading constitute an education in itself. She, therefore, suggests the readers cast themselves into the pupil’s situation and become participants in Rousseau’s pedagogical lessons. Only then can readers fully start to recognize the problems of education as ‘social

“build” and the German word “*Bildung*.”

²³⁵ “On façonne les plantes par la culture, et les hommes par l’éducation ” (OC IV, p. 246).

transmission' and appreciate the narrative's allegorical dimensions. Salkever (1977-8/2006) defends a similar view, and refers to *Jugement sur la Polysynodie* (OC III) where Rousseau states that the readers have to learn to read and not the authors to write coherently.²³⁶ He thus demanded more of the reader than of himself. Dent (1988) also argues that any contradictions may be within the reader; that it makes no sense to blame Rousseau for paradoxes if they were writing tools intended to trigger careful reading. Was it not Rousseau's intention to encourage alternative thinking by readers? Moreover, are readers to blame for misunderstandings rather than the author for supposed inconsistency? One thing is sure: Rousseau will never give us an answer to those questions. We only have to accept that there are numerous ways to read *Émile*. Yet, Løvlei (2008) states that paradoxes have an educational function by forcing the transformation of thinking, even if they may be a plague for those who search for clear-cut answers.

Besides being a new way of writing, it is possible to identify many other hypothetical purposes that engendered *Émile*. Inspired by the various aims Lähde (2008) distinguished in his reading of the 2nd Discourse, I have tried to search for what might have generated *Émile*. Among the issues I believe Rousseau wished to highlight, beside the transformation of reader's thinking, are: advancing a vision of a better society; contrasting a more ideal education with the existing one; demonstrating social contradictions and injustices; participating in the educational discourse of his time (especially to argue against the educational theories of Locke and other scholars); and lastly, highlighting the importance of childhood. These aims are so intermingled that totally separating them makes little sense. Nevertheless, they are individually useful in illuminating the layered meanings of the story. And it is quite obvious that Rousseau's intentions were political, although he tried to make the actual political education of children invisible until they reached the age of 15, the time of what he called "the second birth."²³⁷ So, although practical education before that age may seem impartial, the purposes were not indefinite. The book exists on all the levels I described in Chapter Three: physical or actual (it actually often deals with practical educational questions), mental (it deals with dreams and thoughts),

²³⁶ Rousseau also talks about the problem with consistency in a long note in *Émile*, and he admits that he often contradict himself. In his defense he writes: "Definitions could be good if words were not used to make them (E, p. 108n).

²³⁷ "We are...born twice: once to exist and once to live; once for our species and once for our sex" (E, p. 211).

theoretical (the entire approach is a thought experiment), allegorical (it has a high symbolic level), and metaphysical (*Savoyard Vicar*).

Rousseau definitely wanted to point to politics, social contradictions, and anomalies, and to make people discuss and reflect more on educational matters. However, with *Émile*, Rousseau was more interested in awakening an interest in general principles than with giving strict instructional prescriptions. *Émile* is more than a pedagogical argument; Rousseau also addresses many other kinds of social problems in *Émile* than education, and his criticism of formal religion was not accepted without hesitation (see Chapters Four and Five). When writing *Émile*, Rousseau hypothesized a general overview of education. He wanted to give an idea about an education that would be very different from what was conventionally practiced. He argued that the existing education relied on false premises about childhood and therefore pointed in the wrong direction. He wanted to portray an education built on other grounds, namely on what children actually would be able to understand, which in turn would lead to a more equal and good society.

Julie

Rousseau painted many parallel utopias in order to inspire his readers to judge their society. Besides *Émile*, which describes the solitary education of a young boy, *Julie* depicts family life and domestic education. *Julie* is a philosophical love story written as a novel and is structured in the form of letters between two lovers that point to individual and societal aspects in addition to education.²³⁸ The author's intention to provoke the reader becomes obvious in the *Second Preface* of *Julie*. According to Rousseau, a novel has to use ordinary language, expose taken for granted maxims, and please and engage the readers. "[A] Novel if it is done well, at least if it is useful, is bound to be hissed, hated, decried by fashionable people, as an insipid, extravagant, ridiculous book; and that ... is how the world's madness is wisdom" (JNH, p. 15-16). Rousseau wanted to set another tone than the one that characterized the big cities; he wanted to draw an alternative picture that should be followed by common people all over the country. The picture he draws in *Julie* shows simple daily life on a small farm situated in a beautiful natural surroundings. The life of the few characters offers no fashionable pleasures, but their common actions are filled

²³⁸ *Julie* is sometimes also referred to as 'a collection of letters', but is mostly called a 'novel'.

with honesty, friendship,²³⁹ love and respect for each other. Rousseau also does not hide his utopian intentions. In his *Dialogues*, he clearly states that he wanted to portray personas that he felt he could love.

The “New Heloise” in the title relates to the legendary and tragic love story of 12th century philosopher Pierre Abelard and his pupil Heloise. Their marriage had been cruelly attacked, they were separated, and Abelard’s published account of their sufferings was a passionate correspondence between man and wife. As with this true love story,²⁴⁰ *Julie* is also a story about desire and redemption, about saintly living and the choice of spiritual ambition over worldly passions (see Stewart, 1997). It is a story embodying desire, reason, locality, values, and beliefs. The portrait of the characters can also be read as allegories of different states of mind where particular dispositions are given to each character (see Chapter Three). In addition, it is a struggle between body and soul, men and women, since Rousseau had an ambivalent relation to both sexual experiences and gender.

Julie not only connects to *Émile*, the *Social Contract*, and the discourses: comparing *Julie* to *Confessions* reveals clear connections between these two books, as well. The story begins with a letter in which Julie’s young tutor, *St. Preux*, declares love for his young student. The story goes on to describe the growing love between the two and the time they spend together in educational situations that also involve Julie’s cousin *Claire*. In this respect, the initial context is an educational situation. The book also contains a section of approximately 20 pages where Julie and her husband *Wolmar* explain the principles they follow when they instruct their children. This part of *Julie* is very much in line with *Émile* and of great interest for the analysis provided in this chapter.

A Discourse on Political Economy and Botanical Writings

The essay *A Discourse on Political Economy* was written for the *Encyclopedia*, where it was first published in 1755, and later separately published in 1958. This text contains thoughts about how to educate citizens and make them into active

²³⁹ Without pointing to any direct connection, I cannot avoid comparing the way Rousseau talks about friendship in *Julie* with the way Aristotle describes virtuous friendship in his *Nicomachean Ethics*.

²⁴⁰ In Chapter Three, I wrote that even if the narrative in *Julie* is fictional and on the surface a love story, much of Rousseau’s basic philosophy lurks beneath the surface. Undoubtedly, the story relates to Rousseau’s own life and love affairs as a young man and as he was writing the novel (see C). However, I do not find this connection relevant to my purposes, and have instead concentrated on what emerges from the story, either directly or indirectly, in relation to education.

participants in society. It bears comparison to *Émile*, written a few years later, that deals with the education of an individual.

Though not well known today as a botanist, botany was nonetheless one of Rousseau's favorite activities. This becomes obvious from his *Botanical Writings* that include a dictionary of botanical term and letters from Rousseau's correspondence with other persons interested in botany, and the so-called *Elementary Letters of Botany* to Mme Delessert are guidance for her instruction of her daughter. These letters are especially of interest for this study, because they deal with the actual practice of nature education.

6.2 Creating the Natural Individual

The foundations of education are three, according to Rousseau: *nature*, *men* (humans), and *things* (E). The natural foundations of education entails the inborn physical and physiological inclinations that are beyond the influence of instruction; the education of humans entails that they can be brought by others to use their own inborn features; and the role of things in education entails education through the experiencing of objects. The world around becomes familiar through the direct experiences of one's senses, not through the representations of pictures or models.

Other people—educators—can only partly intrude into education about things. If the teaching of the three 'masters' (nature, things, and humans) conflict, the person is poorly educated (E). If they are in harmony, the person is well-educated. For example, a hasty education neglects nature and leads children to become independent too quickly; this actually risks making them reliant on others. In the end, Rousseau wanted children to become members of society; responsible, not selfish. In *Émile* Rousseau argues:

Natural man is entirely for himself. He is numerical unity, the absolute whole which is relative only to itself or its kind. Civil man is only a fractional unity dependent on the denominator; his value is determined by his relation to the whole, which is the social body. Good social institutions are those that best know how to denature man, to take his absolute existence from him in order to give him a relative one and transport the *I* into the common unity, with the result that each

individual believes himself no longer one but a part of the unity and no longer feels except within the whole.²⁴¹ (E, p. 39-40)

This might at first sound like a paradoxical contradiction of Rousseau's other thoughts in *Émile*. Is it not foolish to want to educate somebody as a holistic being only to become a mere fraction of a greater entity, thus making someone who is independent in effect dependent? Did Rousseau not emphasize freedom and autonomy? If so, what is this about?

Viewed in the light of Rousseau's educational agenda in *Émile*, he simply means that persons need to strengthen their wholeness before they can be a part of the greater entities of society and humankind. If we read *Émile* as part of Rousseau's overall vision, we will also recognize that a just society requires more than only one good member, like Émile; his education has to be the model of a larger goal and must be repeated by others. Parry (2001) correctly maintains that Rousseau rejected an education that repeats the vicious circle and that he wanted to replace it with one more virtuous (see above). While the parents and others involved in the child's upbringing are infected by their own *amour-propre*, the tutor is the one who can break the vicious circle (Broome, 1963). This is achieved by keeping Émile apart from society where others could contaminate him. He is therefore prevented from imitating a bad political model. The only models Rousseau allowed the young Émile were the natural world and its 'things', according to Rousseau. However, the importance of the tutor was not to be overlooked. Because Rousseau regarded the child as intrinsically good, a *negative education* holds the child back and protects it from mistakes, instead of affirmatively teaching virtue and forcing the child in a particular direction. Such 'negative' education was intended to prevent Émile from significant social impact while still a child. He wanted to grant Émile time to grow slowly, so he could first feel his innate freedom as an individual and live a life more in line with the animal features in him than a life influenced by what culture offered. "[H]e must respond only to what nature asks of him, and then he will do nothing but good" (E, p. 93). He should not be socialized, then, until the innate *amour-de-soi* condition has become strong enough to combat the pressure of social contaminants. Negative education "consists not at all in teaching virtue or truth but in securing the heart from vice and the mind from error" (E, p. 93).

²⁴¹ The italics are original.

If you could do nothing and let nothing be done, if you could bring your pupil healthy and robust to the age of twelve without his knowing how to distinguish his right hand from his left, at your first lessons the eyes of his understanding would open up to reason. Without prejudice, without habit, he would have nothing in him which could hinder the effect of your care. Soon he would become in your hands the wisest of men; and in beginning by doing nothing, you would have worked an educational marvel. (E, pp. 93-94)

Instead of residing in a corrupt environment that confronts him with criticism and reprimands, *Émile* lives an innocent but isolated life with his tutor. Rousseau states clearly at the beginning of *Émile* that he wants to show what humans would be without the self-contradictions that are obstacles to happiness. Thus, the best route to human happiness is not what educators do, but what they leave undone; their non-action. Mimesis is natural for humans, but it is damaging in society, moreover, children easily imitate bad habits. The maturing process must be delayed so that children are capable of understanding abstract concepts and moral reasoning before they are confronted with challenges to their happiness. The quantity of knowledge is less important than encouraging the children's own thinking and judgment. Self-knowledge and self-control are the first things a child needs to learn. However, the picture of the tutor's role in *Émile* shows that teaching is not so much about non-acting (an attitude of 'letting go') as much as it is a matter about hidden guidance, so it only seems like the tutor would not act. Parry (2001) calls this "defensive" or "protective" education (p. 252).

Let him always believe he is the master, and let it always be you who are. There is no subjection so perfect as that which keeps the appearance of freedom. Thus the will itself is made captive. The poor child who knows nothing, who can do nothing, who has no learning, is he not at your mercy? Do you not dispose, with respect to him, of everything which surrounds him? Are you not the master of affecting him as you please? Are not his labors, his games, his pleasures, his pains, all in your hands without his knowing it? Doubtless he ought to do only what he wants, but he ought to want only what you want him to do. He ought not to make a step without you having foreseen it; he ought not to open his mouth without your knowing what he is going to say. (E, p. 120)

While Rousseau often used allegories, the relation between the child and his tutor can also be read as a miniature of the relation between the citizen and the law, in order to make the readers realize that they might need to submit to the general good before they have the right to enjoy the benefits of society. One can even interpret *Émile* as

an allegory for adult human self-improvement (what Foucault called ‘practice of the self’ or ‘taking care of the self’) in which (in Platonic language) the rational and strong part of the soul teaches the desiring and weak part to distinguish between artificial and natural needs. It came as a surprise to Rousseau that anyone would take his account of *Émile*’s education as a manual. If we want to understand at least a little of the book we have to give up the idea of realism. However, if Rousseau intended to incite thought, contradictions become challenges that trigger thinking. Obviously, Rousseau provocatively wanted to address the irresolvable conflict between individual freedom and social responsibility. But when Compayré (1958) states that Rousseau wanted to build a wall around *Émile*, I prefer to say that Rousseau wanted to ensure that nobody cut off *Émile*’s wings before he was ready for full-fledged flight. Rousseau’s main purpose was the education of an individual who is free but also responsible. Freedom has to be constantly re-claimed throughout life, but the process requires continuous participation in actualizing the general will (see Affeldt, 1999/2006). By “freedom” Rousseau meant freedom from one’s own subjugating passions and the craving to obey social pressure. It was not a freedom to do whatever one likes but, rather, freedom from slavery of all kinds, what Kant called “positive freedom” (see chapter One).

In Affeldt’s (1999/2006) opinion, the paradoxical quandary of using force to make another free is a problem Rousseau encounters throughout his philosophical experiments. This philosophical position challenges, for instance, Plato’s allegory of the cave²⁴² (ibid.). As with the *Social Contract*, *Émile* presents also two options: the familiar corrupted and enslaving state and a contrasting state of equality and freedom. “In this way, philosophy, as Rousseau understands it and writes it, works to force the individual to change, to turn towards the possibility of humanity and freedom” (ibid. , p. 419). This was probably Rousseau’s primary view of education: to force individuals towards freedom, not by changing them in a predicted way with respect to the aims, but by a process that builds on their natural inclinations and strives for a voluntary self-transformation. *Émile* is, therefore, not a blueprint, but a thought-provoking poem, an educational work that aims at the reader’s transformation.

²⁴² See Plato’s *Republic*, Book VII. See also Chapter One in this book

Childhood as an Aim

Disappointed with how children were raised, Rousseau's wished to display the childhood and the individual child, according to the idea that the other, the child, is new. Every child is unique; it is thus the teacher's task to learn to know the child and adapt education to the child's particular aptitudes. According to Rousseau, education has to be sensitive to the needs of children and not focus only on their future lives as adults. Why train children only for adulthood at a time in history when half of them would never reach that age, asked Rousseau.²⁴³ Rousseau already mentions this need to acknowledge childhood as an end in itself on the first page of the preface of *Émile*:

Childhood is unknown. Starting from the false idea one has of it, the farther one goes, the more one loses one's way. The wisest men concentrate on what it is important for men to know without considering what children are in a condition to learn. They are always seeking the man in the child, without thinking of what he is before being a man. (E, p. 33-34)

Rousseau considered education from the child's view; children should be aims in themselves and childhood a crucial time and aim in itself, as well (E). By dividing the period from birth to adulthood in four stages: infancy (0-2 years), childhood (2-12 years), pre-puberty (12-15 years) and adolescence (15-20 years) Rousseau showed that children, not just adults, should be included in the concept of "human," and that each stage of the developing human has its own character that needs to be identified and addressed by education. He emphasized that it is easier to cultivate children than to cultivate adults, since the younger they are the less they have been prejudiced by society's ills. While each stage is important, the most precarious time in human life is from birth to age twelve. This period is crucial to human development, though impossible to try to force the children to learn something they do not understand. The tutor's role is primarily to be a good model and arrange beneficial learning experiences. Since it is so very difficult to get rid of any prejudices acquired during this period, children need to be protected from bad influences. Therefore, this time has to be the primary time for training and developing the capabilities of children and for getting them to sense the world from their own perspectives. After this joyful but not idle period the child will be ready for focused study and work.

²⁴³ The high child mortality was a cruel fact in the 18th century France (see Bowen, 1981; Heywood, 2007).

Even though Rousseau argued that the child is born good, he recommended beginning education immediately after birth (JNH). Childhood has its own way of acting and sensing and every child is a unique personality. However, but that personality cannot expand in the right direction without skilful guidance; natural dispositions need cultivation. Because education has to fit each child's unique personality, education starts with careful observation to determine the child's character and to plan instruction. Before children become mature, they need the freedom to be childish. No one can enforce the maturation process; it has to take its own time. This will not happen before the body has gained strength and, therefore, children have to be free to move before they grow old enough to sit still and reflect. Their first source of learning is their own body (E). Before they reach the age of reason, they have to learn to respond to their own hands, feet, and eyes. The well-functioning mind arises from the receptive senses of a well-functioning body. Using the language of reason with small children is futile since they cannot reason yet.

Wise education not only starts with recognizing *a* child, but *the* child. The child's own character may not be changed or force-fit to suit preordained goals. In a sentence that contains a clear contradiction, he states:

In addition to the constitution common to the species, each individual brings with him at birth a particular temperament which determines his genius and character, and should be neither changed nor constrained, but formed and perfected. (JNH, p. 461)

This might sound inconsistent: is it possible to form something without changing it? Can education perfect somebody without any vision of the direction? Rousseau was, almost like Plato, sure that there is a goodness that is common for all humans and about which all non-corrupted humans can agree (see SC or DPE). However, Rousseau's aims can be seen as universal and 'natural', but also as indefinite.

Each advances more or less according to his genius, his taste, his needs, his talents, his zeal, and the occasions he has to devote himself to them....We do not know what our nature permits us to be. (E, p. 62)

The virtuous circle of Rousseau's thought experiments depicts education as a process that aims at a steadily transformed society rather than at a predetermined end (Parry, 2001). Education has to make students capable of leading their joint lives effectively. Humans are not born with equal capabilities but educational goals nonetheless need

to strive towards equal opportunity in society. “Everything works together for the common good in the universal system” (JNH, p. 462) and in this system all humans have their own appointed place. The role of education is to find the right order, not to correct nature since nature is always right. It is not possible to change others unless one changes their temperament; but it is possible to make persons pretend that they are other than they are. However, there are always situations where they will return to their inner dispositions (JNH). What does this mean? In Rousseau’s own words:

Once again the question is not to change the character and bend the natural disposition, but on the contrary to push it as far as it can go, to cultivate it and keep it from degenerating; for it is thus that a man becomes all he can be, and the nature’s work is culminated in him by education.²⁴⁴ (JNH, p. 464)

The child should be prevented from the errors and prejudices and “pushed” in the opposite direction. It is not the adult’s view of the world that should be central, but the child’s own experiencing of the environment. The adult calls forth the child’s own self-directed learning. It does not take place without the adult’s careful choices, but the child is “provoked to freedom”²⁴⁵ as an individual who has the aptitude for becoming autonomous²⁴⁶ (Benner, 2001; Oettingen, 2001; Uljens, 1998, 2002). Oettingen (2001) sees this provocation as a crucial educational principle throughout *Émile*. I agree, because Rousseau’s main interest was to encourage the child to become independent. Children want to learn because they are born with an aptitude for perfectibility and the free will to choose their own lives. Rousseau saw the child as a companion who possessed various capabilities but as too weak to make use of them without guidance. He was, however, very much against forcing children to learn a lot of facts; they should be encouraged to become curious rather than accept

²⁴⁴ “Encore une fois il ne s’agit point de changer le caractère et de plier le naturel, mais au contraire de le pousser aussi loin qu’il peut aller, de le cultiver et d’empêcher qu’il ne dégénere [sic]; car c’est [sic] ainsi qu’un homme devient tout ce qu’il peut être, et que l’ouvrage de la nature s’acheve [sic] en lui par l’éducation” (OC II, p. 566). Please, pay attention to the verb *poussare* that is the intransitive form of *pousser* (push).

²⁴⁵ Dietrich Benner uses the German term *Das Prinzip der Aufforderung zur Selbsttätigkeit* and Uljens the Swedish *principen om uppfordran till självverksamhet*. The word *Aufforderung* is difficult to translate into English. Uljens (2002) talks about “provocation to self-reflection.” I will use the concept “provocation to freedom,” since I see the process as more than thinking; it is also about activating and thus includes “provocation to self-activity.” Benner (2001) also sees *Aufforderung zur Selbständigkeit* as both reflection and action. Williams (2001) suggests “summon” and “call” as translation to Fichte’s *Aufforderung*.

knowledge as fixed and final. Education should not be a matter of forceful pulling but of pushing with appropriate force. With the word “push” Rousseau meant that education should encourage children to start making their own judgments and to move according to their own aims instead of pulling them towards the aims educator’s have for them. The unbiased educator can show directions, but the future shows the final ends, because students must be allowed to participate in the creation of their own futures. Nevertheless, the strength of the push could not be the same for every child. While humans are born with various aptitudes, they need to learn to use these aptitudes wisely and not to try to expand their self-caring at the expense of others.

To one genius you must give wings, to another shackles; the one needs to be goaded, the other held back; the one needs to be encouraged, and the other intimidated; you should sometimes enlighten, sometimes stupefy (JNH, p. 464).

Émile as a Reverse

A critical stance towards education is also obvious in the *1st Discourse*; there, Rousseau claims that the children of his time are not learning what is essential for life. Large institutional settings are destroying them; they can hardly speak their own language and instead speak a language nobody uses anymore (viz., Latin). Generosity, justice, moderation, human kindness, and courage are unfamiliar to them, and they do not learn to separate truth from delusion, although they are capable of deception that hides their profound ignorance. Schools also neglect the native country and God. It is better that a child plays than wastes time learning useless facts, according to Rousseau. Neither words nor pictures can compensate for experiencing the natural world. Words are easy to repeat, whether one understands them or not, and art cannot promote a virtuous education. When reading books, the author steps in between the content and the reader and this impedes the child’s own thinking (Parry, 2001). Not only words, but also pictures and sculptures represent perversions of minds, says Rousseau who was upset that children encounter such images in their immediate surroundings even before they can read (1st D). It is easy to make use of the child’s memory, but this is not an intelligent use of their childhood, and it is definitely a question about education by use of force—but a force that neither aims at

an education that is good for its own sake or for any higher future aim, such as freedom or goodness.

Force a child to study languages he will never speak, before he has even learned his own; make him constantly rehearse and parse verses he does not understand, the whole harmony of which for him is only in his fingers,²⁴⁷ muddle his mind with circles and spheres of which he has not the faintest notion; overwhelm him with a thousand names of cities and rivers he constantly mixes up and learns anew each day; is this cultivating his memory for the good of his judgment, and is this whole frivolous learning worth a single one of the tears it costs him? (JNH, p. 475)

Everything children see and hear make impressions, and the objects displayed for children should therefore be chosen carefully. In order to teach Émile humaneness and love for his fellows, Rousseau, the tutor, provided him with occasions that allowed him to experience models of decent behavior. Actions not words were central. Children's vices all come from bad models; this is preventable by keeping them away from things and people that can destroy their innocence and it spares them from establishing prejudices. Instead of filling the children's brains with all kinds of information to be recalled, Rousseau argued that children need to know their duties as human beings and how to live in accordance with both their natures and as part of human nature in general.

All the first moments of nature are good and right. They aim as directly as possible toward our preservation and our happiness, but soon lacking strength to maintain their original direction through so much resistance, they let themselves be deflected by a thousand obstacles which, turning them away from their true goal, make them take oblique paths where man forgets his original destination. Erroneous judgment and the strength of prejudices contribute a great deal to our being thus misled. (RJJ, p. 9)

Born Free

Rousseau argued that childhood ought to be a time of liberty not of restraint. Until the 18th century, the habit was widespread of wrapping infants like mummies so they could move neither their arms nor legs to keep them warm and make their body

²⁴⁷ This refers to the habit of counting syllables on the fingers (see Stewart & Vaché, 1997).

strong. Older children were also often raised by a strict regime of authority to show respect (Heywood, 2001). Children are active and need to use their bodies to climb, run, and play outdoors, protested Rousseau, furious over the Parisian paradigm of sending infants to wet nurses in the country and not giving them a loving upbringing among their own family members (E). Upper class children seldom saw their parents (Gay, 1966; Heywood, 2007). From the wet nurses a girl was sent to a governess, then to a convent, and finally pushed into a marriage (Gay, 1966). Adults often treated older children as miniature adults; they were dressed like adults and were expected to understand the same subjects and be interested in the same things as grown-ups. Nurses even bound the heads of the children to make them look more mature (Eby, 1952; Bowen, 1981). Education strived to transfer knowledge to the following generation and the child's task was only to imitate and memorize. Lacking better methods, adults tried to teach children morals by means of punishment.

Beginning with the early 18th century, a child was shaped by strong powers and objects for conflicting wills. Many images of children flourished in Europe, and children were considered to be somewhere between innocent angels and small devils. Very often, however, they were thought of as in possession of origin sin, and the sin of Adam had to be hammered out (Heywood, 2001). The child's weakness and the allocation of power in the child's education are central elements in the education of *Émile*. According to Rousseau, small children lack power but have a lot of energy and thus need to lead a physically active life.

Before prejudices and human institutions have corrupted our natural inclinations, the happiness of children, like that of men, consists in the use of their freedom. But in the case of children this freedom is limited by their weakness. (E, p. 85)

Nevertheless, along with increased age, their strengths grow, and they become more independent. The educator's role is to give children freedom but restrict their misuse of it for their own selfish benefit (E). Children should be encouraged to do more on their own and demand less of others. Neither the tutor nor the child should command the other. *Émile* is not allowed to use more power than he possesses and thus cannot demand that others serve his selfish wishes. True happiness is reachable if the desires and the power one possesses are congruent.

[I]t is in diminishing the excess of the desires over the faculties and putting power and will in perfect equality. It is only then that, with all the powers in action, the

soul will nevertheless remain peaceful and that man will be well ordered. (E, p. 80)

The more the children experience the more they learn to desire and hope to satisfy their wants. But this is an endless race because they will only have to confront ever-new desires. “Thus one exhausts oneself without getting to the end, and the more one gains on enjoyment, the further happiness gets from us” (E, p. 81). Rousseau calls lies, vanity, envy, and even anger “vices born of slavery” that act against nature. However, he does not expect that these vices can be prevented; instead, he suggests that children should be encouraged to face and combat these obstacles in order to strengthen their ability to reject them in the future.

In *Julie*, Rousseau promotes an education that makes children free, patient, affectionate, and docile, rather than creating rebels who try to dominate adults. Rousseau points out that the difficulty in teaching children is that adults are always more powerful, regardless of whether the adults are servants or parents. Children need to learn that adults serve them out of compassion, not out of duty. Children should not learn that servants have the duty to serve them; they should meet their caretakers and educators with humility, thus inspiring a proper longing for becoming increasingly independent (JNH).

In this respect, the prospect of increasing freedom becomes a crucial goal of the child. Although Rousseau appreciated childhood and wanted children to live a happy life, he points out in *Julie* that an enlightened mother does not try to give her child immediate pleasure but, instead, is more aware of the abilities her child will need to thrive in the future. Crucial, then, is that under no circumstances should children be allowed to rule. They have to understand that they are dependent on others for their wellbeing. Children thus have to learn to show love, “for one loves by making oneself loved” (JNH, p. 468). Love is a mutuality born of equality. However, children do not stand on equal ground with adults when it comes to their ability for reasoning, and thus they need to be prevented from believing that they know more than adults do and from having their vanity grow by expecting every little word they utter to be admired and applauded by adults (JNH). Such self-importance can cause children to think they are better than others are and can lead them to seek constant attention. Humans have to learn from the beginning to spare their words, not to speak nonsense, and to act responsibly.

Rousseau strongly argued against the custom of correcting children with punishments and forbiddances, and he completely opposed Locke's conclusion that the child should be bent and forced to obey. *Émile's* education is not cruel, but it is purposeful and it is without doubt manipulative, although the methods are extraordinary. For Rousseau children are naturally free and their freedom should not be overruled, at least not openly so they experience that they are being manipulated. He wants *Émile's* guidance to take place by help of clever means that prevent the child from noticing that learning situations are arranged. *Émile* is taught to suffer the consequences of his own actions; for example, he has to sleep without a window when he has scratched the glass with a ball, but he is not beaten. However, being made to sleep in a cold room could also be considered to be cruel punishment. Bloom (1978/2006) finds ironic Rousseau's formula that the child must always do what he wants to do but he should want to do only what the tutor wants him to (see E). Bloom's claim makes it sound like the tutor was obsessive, however, and gives an oversimplified picture of Rousseau's educational endeavor.

However, it is not so far from what Rousseau says in *Émile*, namely that the impression should be given that the student is the master; education thus shall seem free even though it is calculated to direct the child's own will. In Heywood's (2007, p 40) opinion, creating this illusion of freedom is even manipulative "to a degree that now seems shocking." I agree, but perhaps Rousseau's actual intention was to shock his contemporary readers. We can, on the one hand, excuse Rousseau for being a better educational philosopher than practitioner and might call his examples flawed. On the other hand, the education of *Émile* can also be taken as an example of what Foucault called "governmentality." *Émile* is led to believe that he is free even though he is being subjected to governmentality. If we experimentally imagine that *Émile* lives under virtuous circumstances, his will then becomes a part of the general will through the social contract. If, on the other hand, society misuses his will, it can be subjugated towards ends he would not otherwise seek. An education that develops his own will makes him free and thus ready to reply independently to social demands.

Does this then in truth mean that Rousseau wanted to encourage the educator to endorse freedom through force? In a way, yes, because the adult is stronger. Is this doable? Schaffar (2008) states that the paradoxical problem with endorsing freedom with force is mainly theoretical and disappears in practical educational situations, but Rousseau's *Émile* is an evident example of how complicated this is. *Émile* is a masterpiece that problematizes this paradoxical problem. In noting that education

based on the idea that an individual is free but the teacher is the one who controls how to use this freedom, Kant, whose educational lessons leaned on Rousseau's *Émile*, raised the "education paradox" as a problem in *On education*:

One of the greatest problems of education is how to unite submission to the necessary *restraint* with the child's capability of exercising his *freewill*—for restraint is necessary. How am I to develop the sense of freedom in spite of the restraint? I am to accustom my pupil to endure a restraint of his freedom, and at the same time I am to guide him to use his freedom aright. Without this all education is merely mechanical, and the child, when his education is over, will never be able to make a proper use of his freedom.²⁴⁸ (Kant, 1803/1900, p. 29)

Løvlie (2008) says that Rousseau neglected this pedagogical paradox and promoted both freedom and the establishment of rules for *Émile*. I think Rousseau actually had the unambiguous intention of using *Émile* to highlight the paradox of forcing somebody to be free. He preferred to be a man of paradoxes more than a man of prejudices. Oettingen (2001) addresses another side of the same paradox in Rousseau's education, namely that 'humans have to learn to become humans'. Yet, if we read *Émile* in light of the 2nd *Discourse* this is no paradox because what Rousseau wanted was to educate the children he regarded as humans in the state of nature to, on one hand, remain natural and thus good and, on the other hand, to become civilized and responsible members of society. It was not enough only to become a human being, but also *humane*, and therefore, he wanted to force *Émile* to become free. This means that the child should be educated so he is prepared some day to face both his own intrinsic and animal nature and to reflect on his role as a member of society. Denying either requirement means not being a free member of human society. Kivelä (2004) notes that education has to address humans at both an individual and a social level, and should not see these different dimensions as contradictions, but as two innate and complementary forms of human life. I do not agree with Schaffar (2008) that we can solve the paradox in practical situations or with Kivelä (2004) in his argument that, at least theoretically, we can solve the paradox. Instead, I see the paradox Rousseau put on the table as a conflict that creates an intellectual anxiety. This anxiety opens the doors for educational researchers and practitioners to continue searching for better ways of educating new generations. However, it also shows that *education*, *ethics*, and *politics* are three branches of the same tree of human

²⁴⁸ The italics are original.

intercourse (see Benner, 2005; Uljens, 2008). The initial problem is how to regulate but also stimulate individual growth towards a freedom that is wed to social responsibility. Benner (2005) calls this paradox a foundation of education because the educator can set in motion learning processes that the child never could achieve without help of an adult. Awareness of the paradox can operate as a warning signal that prevents education from becoming indoctrination.

Rousseau's forceful route to freedom can be compared with how Foucault, in Kant's, footsteps declared that enlightenment could be considered as a way out, a situation where individuals start questioning themselves, other people, and seeking to understand how various issues are related in the present day (Foucault, 1997h). Such an ethos opens the gates towards maturity, although humans probably never will become fully mature. Freedom is not doing whatever one wants; it demands knowledge, self-understanding, and following accepted codes of behavior (see Nilsson, 2008). One has to learn to manage one's desires and passions to avoid dominating others, to respect their freedom. A freedom that allows anything is no real freedom. Freedom needs to be reshaped all the time. Then the modern project becomes a kind of attitude where individuals create themselves as responsible parts of the societal whole. No one can be educated directly into freedom but only to choose freedom. This happens when the individuals learn to have a critical attitude towards possible prejudices, commonly accepted 'general norms' and 'obligations', and also towards themselves and their own self-creation (see Foucault, 1997h). In *Émile*, however, Rousseau could ignore these paradoxes because the situations he created were not real, but ideal. Moreover, as ideal pictures they could portray visionary directions rather than serving as models to be slavishly followed.

Nevertheless, I would be willing to agree with Løvlie (2008) that Rousseau had difficulties solving the conflict between freedom and manipulation. Rousseau chose Sophie for Émile, and he had painted an attractive picture of her beforehand in order to really catch Émile in a trap. But, when reading *Émile et Sophie* it seems as though it was Rousseau himself who was caught in the trap; for some reason, then, he decided to reshape the happy end in *Émile*. Émile's and Sophie's happy marriage ended in Paris. Isolated with few friends and no support, and surrounded with people with completely different values, they were not able to live in accordance with what they had earlier learned was right. It is not enough to have learned good principles; people need continuous sustenance because there are always forces that will incline one to act in other directions. In safe groups, members can support and encourage

each other to act decently. Mutual care and responsibility grows when appreciating and recognizing each other.

Recognition

The understanding of *Amour-propre* helps us to understand who we are, according to Rousseau. On the one hand, *amour-propre* lets us ‘discover’ who we are; on the other hand, it helps us to ‘make’ or ‘construct’ ourselves (O’Hagan, 1999/2006). That means that *amour-propre* helps us use our own ‘natural’ qualities to transform ourselves and become more than what we were at birth. O’Hagan holds ‘reflection’ as a key component of *amour-propre*, and he does not see reflection as something solitary but, rather, as depending on common forms of mutual *recognition*.²⁴⁹ Other people recognize what is worth recognizing. Therefore, *amour-propre* is a tool for both self-understanding and self-improvement, and it works through the process of recognition. *Amour-propre* is nourished because “[i]n the play of interaction one seeks to find oneself in the eyes of others” (O’Hagan, 1999/2006, p. 340). However, this nourishment is positive only if the others yield a true reflection of the person. Conversely, if the reflecting-others are corrupted, *amour-propre* will develop negatively. However, individuals who do not trust such others anymore cannot gain positively from their recognition but are turned away instead (O’Hagan, 1999/2006). Without trust in others, humans can turn to themselves, but lose the source of self-knowledge if they are left alone (ibid.).

He loves men because they are his fellows, but he will especially love those who resemble him most because he will feel that he is good; and since he judges this resemblance by agreement in moral taste, he will be quite gratified to be approved in everything connected with good character. He will not precisely say to himself, “I rejoice because they approve of me,” but rather, “I rejoice because they approve of what I have done that is good. I rejoice that the people who honor me do themselves honor. So long as they judge so soundly, it will be a fine thing to obtain their esteem.” (E, p. 339)

Amour-propre can also be dangerous if used to uphold destructive social interactions and control. It acts in combination with habits, laws, and social order, and affects all human life (e.g., E, JNH). When Rousseau discussed the education of women, he did

²⁴⁹ With his theory of recognition Rousseau seems to have cultivated the seed of this idea that Hegel, Honneth, and many others have furthered developed (see, e.g., Honneth, 2003).

not mitigate the ill effects of *amour-propre* to the same degree as he did in his education for Émile.

In Affeldt's (1999/2006, p. 424) opinion, Rousseau does not actually mean that individuals have to be "forced" to freedom, but "encouraged, attracted, invited, incited, and the like but not literally forced." This sounds like a most probable interpretation of Rousseau's view, and it correlates with Benner's (2005) and Oettingen's (2001) reading of *Émile*. Likewise, it correlates with Benner's (2005) and Uljens' (1998, 2002) educational interpretation of Johann Gottlieb Fichte's *Aufforderung* or "provocation to freedom" mentioned earlier. Fichte noted that individuals do not become free by themselves; both recognition of and inspiration by others are needed for individuals to become conscious of their freedom. An individual has inherent potentials that can be encouraged, but they also grow when recognized by others. This indicates that both acknowledgment and encouragement from others are needed to develop a person's full potential. Conversely, through recognizing and encouraging others, individuals become aware that self-limiting their own freedom advances the freedom of others. Unlimited freedom for everybody is actually not possible and, for that reason, encouragement by recognition is a responsibility owed to others (see Uljens 2002, 2004a; Williams, 1992; Österlund & Wolff, 2006). Provoking others to freedom, however, leads to recognition of one's self by the other. Self-reflection and self-creative activity may be promoted in educational situations so that the learners exceed themselves by becoming capable of doing and understanding more than they would without expectations and 'provocation' from others (Uljens, 2002, 2005). In encouraging such situations, individuals consequently grow mentally and intellectually because they are acknowledged as possessing the potential to grow, instead of being left on their own or abandoned. Rousseau especially emphasized two kinds of growth: self-governance and morality.

In Rousseau's view, recognition also includes its opposite: when necessary, to neglect paying attention. This means that when children cry only for attention, the adult can stop this habit by not showing such attention. This requires, however, that the adult has learned to interpret various reasons for crying (JNH). Children need to be recognized for their own natural qualities, instead of admired or criticized in comparison with others. In *Émile*, Rousseau wants to ensure that his pupil only meets people that recognize him properly; that is, who let him appreciate that he is good in a mainly human way. Rousseau does not want Émile to pretend to be something more

than he is and that others pay attention to him for his pre-eminence. Émile has to remain innocent, or, in Rousseau's word "natural." As an element of *amour-propre*, recognition then plays a basic role in the development of the individual's self-confidence. Parents, teachers, nursemaids, and others have to meet them with dignity and benevolently care for them solely because they are individuals with innate rights as human beings. This is, however, not to say that they have to be 'spoiled'. To the contrary, children need to learn to treat others decently, regardless of social class or occupation. Others will take care of them and love them when they are repaid with love because love is mutual and has to be earned (E, JNH).

The Education of Women

Although Rousseau's opinion was that all humans are born equal, when it came to the education of women, Rousseau was largely conservative and women have argued against his education proposal for girls and women ever since Mary Wollstonecraft's indignant critique in the 18th century (see, e.g., Wollstonecraft, 1792/1992). She attacked him angrily for not noticing that women have the same capability to think as men. Rousseau's educational book bears the title *Émile* and only one chapter of five, the last one, deals with women's education through the imaginary girl Sophie who was to become Émile's wife. While Rousseau wanted to educate Émile to be independent, the same did not apply to Sophie. Her education was in many aspects the opposite of Émile's. Sophie was raised in a social context and learned about religion at an early age because her task was first to follow her mother's religion and, when married, her husband's. Émile was to be strong and active, Sophie weak and passive. The ideal woman Rousseau portrays in *Émile* is a gentle angel made for pleasing her man. While Julie is a gentle character, she is also clever and knows how to control her family members and servants, and how to create a happy, small community. However, first she has to obey her father, who made her abandon her passionate lover and, after him, she had to obey her much older, emotionless, and rational husband because Rousseau meant that "[w]oman is made to yield to man and to endure even his injustice" (E, s. 396). In many ways Julie is a kind of female saint, a martyr to her own maternal love, and before she died she spent a kind of "last supper" together with her family (the symbolism is strong in this section of the book).

Rousseau repeats the view of women that was typical of his time (see, e.g., Heywood, 2007), but his view is not completely biased since he states in the beginning of the fourth chapter in *Émile* that “[t]hose who regard woman as an imperfect man are doubtless wrong, but the external analogy is on their side” (E, p. 211). In Rousseau’s opinion men and women are similar in that they are both humans, but they have distinct social roles. They “ought to act in concert, but they ought not to do the same things” (ibid., p. 363). The two shall be one; but if they become two it will lead to disaster (see E & S). Sophie’s education thus has relevance for Rousseau’s political theory. Still, it is largely in contradiction with the education of men and does not aim at fostering a free individual who takes care of herself. In fact, it is quite the opposite (see also Okin, 1979/2006).

It is impossible to discuss Sophie’s education in depth here, although it has relevance for Rousseau’s philosophical system. Even if Rousseau’s view of women’s education sounds unfair today, he saw the family as the place where sound social relationships could be built (see also Spring, 2006).

[A]s though the love of one’s nearest were not the principle of the love one owes the state; as though it were not by means of the small fatherland which is the family that the heart attaches itself to the large one; as though it were not the good son, the good husband, and the good father who make the good citizen! (E, p. 363)

As shown above and in *Julie*, a woman’s role in the family was crucial to Rousseau’s social theory (see also, e.g., Lange, 2002). The mother should be the first caretaker of her children. McMillan (1982) interprets Rousseau’s call for the “natural” as a standard for judging many social practices, and she defends Rousseau’s biological view of women as the ones who deliver children, and regards both the family and society responsible for children’s’ upbringing. Motherly love should expand and make the children love their family, and as a result, the children should also learn to love their country (Spring, 2006).²⁵⁰ The woman’s role is to prepare her son for education, and the father’s role is to educate him (JNH). In a first lengthy note in *Émile*, Rousseau stresses the first education provided by the mothers as being the most important. Nevertheless, Rousseau credits Émile’s wife with wisdom when he

²⁵⁰ While I will return to the gender/nature issue in another work, I will drop the gender subject now by suggesting that *Émile* might have been better off after all without the chapter called Book V.

says that even if her name was not Sophie,²⁵¹ she would still be worthy of having that name (Kelly, 2009).²⁵²

6.3 *Educating the Citizen*

In *Émile*, Rousseau wanted to put his finger on social contradictions and anomalies and make people discuss and reflect on not only educational issues but also on general social and political topics. Rousseau's writings clearly show his disgust for what he called "depraved" or "corrupt" society. But, could there be another option?

As discussed in the previous chapter, the 2nd *Discourse* depicts a hypothetical 'state of nature', an initial condition of humankind and describes how the initially good human being gradually becomes more and more influenced by society and starts to act egoistically and improperly. There is a clear resemblance between Rousseau's ways of describing the development of humankind and that of the child. As humankind developed (according to Rousseau's genealogy of humankind in the 2nd *Discourse*), it resulted in various social organizations and in increasingly complex political, economic, and cultural units. The education of human beings therefore had two goals for Rousseau: on the one hand, humans had to be educated for their own sakes as autonomous members of humankind and, on the other hand, as members of society who interact with their fellow humans. To be more specific: Rousseau's anthropology has two dimensions of nature; one is species related and individual (human beings) and the other is social (citizens). On one hand, humans are already by nature good, both for their own sake and for the survival of their species. They act in a way that promotes their own survival. However, to become socially and thus morally good, they need education. The whole idea of education thus represents a conflict between the education of individuals and the education of the members of society.

²⁵¹ The Greek word *Sophia* means wisdom.

²⁵² See e.g., Wollstonecraft 1792/1833.

Individual contra Social Good

Rousseau faced many problems with this dual educational aspiration. Firstly, he did not find it wise to teach a child to become politically conscious as long as the child was incapable of abstract reasoning. If children could reason, they would not need any education, he said (E). Secondly, it did not seem right for him to transfer taken-for-granted political opinions from a depraved society to a child. He did not even find it suitable to raise the child in society, for the child would then obviously imitate bad role models. Moreover, before children learn to know the world, they need to know what natural humans are like; otherwise they will easily be corrupted. The tutor has to create situations that nourish children's sensibility and increase their compassion so that they will suffer with those who suffer and have pity for fellow beings and animals. Thus, children extend in a humane direction, which is the opposite of what might happen if they instead admired wealth and people in superior positions (Ibid.).

As with many other ideas of Rousseau,²⁵³ this resembles a recurring fall and redemption cycle. Rousseau associated a politically healthy society with morally healthy society members who actively and responsibly maintain the common good (see Broome, 1963). This implies that citizens understand that their own good depends on the common good. To promote this understanding, they need education; the children have to learn to be good by people they love, so they become responsible citizens and voluntarily choose to act in accordance with the general will. Remarkably, when Rousseau used the expression "good" in this respect, he meant a moral goodness (virtue) that can be developed through education, not the inborn "natural goodness" that is a kind of neutral lack of vice with a hint of pity.

"The strongest is never strong enough to be always the master, unless he transforms strength into right, and obedience into duty" (SC, p. 4). While force is a physical power, it cannot have any moral effects. "To yield to force is an act of necessity, not of will—at the most, an act of prudence" (ibid.). There is no duty to obey other humans simply because they hold more power. Then the opposite would also be an option: if one does not obey, the other loses power. While force does not create right, one is obliged to obey only legitimate powers. No humans have natural authority over others. Legitimate powers are created through agreements, not by force. When every society member is ruled by the interest of *amour-de-soi* they

²⁵³ See Chapter Five, Second Revolution.

jointly act according to ‘the general will’ that is a common agreement, a contract; and when they are ruled by *amour-propre* the result is ‘the will of all’ that includes many different wills, which in reality means that only some members of society get what they want since the possibilities are limited. Consequently, ‘the general will’ is indistinct from ‘the will of all’. If humans ever are going to arrive at a better society, they have to improve their commonly held aspirations (see also Broome, 1963). A government can hardly rely on mere obedience; it thus has to transform individuals in line with what it wants, or, as Rousseau put it: “The most absolute authority is that which penetrates into a man’s inmost being, and concerns itself no less with his will than with his actions” (DPE, p. 130). Then individuals will gradually become what their government wants. This clearly correlates with Foucault’s concept of “governmentality.”

The short supplemental story in *Émile*, called *Émile et Sophie*, totally changes the successful conclusion of *Émile*. The glorious life that Rousseau envisioned for the young couple and their child failed to materialize, and Émile was once again as alone as he was at the beginning of *Émile*. Their shared family life first encountered tragedies and then the family moved to Paris to start anew; but there they became alienated both from themselves and from each other, and their shared life ended when Sophie betrayed Émile. Why did Rousseau reverse the pleasant picture he earlier had painted? Nobody knows for sure; one can only guess. Firstly, he might have wanted to play with the readers and again show this contrary situation in order to trigger their thinking by showing that the end is never definite. Secondly, he might have wanted to show that even a good education cannot always protect someone from a sorrowful life, although it provides a foundation for helping people to bear their miseries and to get on with life. When Émile had to work as a slave, he performed his task with Stoic calm. Yet, he had left his homeland and could no longer participate in the civic life. He could not even raise his own child, had given up his business, and the only thing he had left was his self-love, his *amour-de-soi*. All passions and pleasures were gone, but he still had peace in his heart. “Freedom is found in no form of government; it is the heart of the free man. He takes it with him everywhere” (E, p. 473). They can sell his body, but never his being. Nevertheless, solitude is not the best alternative, as long as it is possible to be a part of a society. “I had to seek whether I was still that man who knows how to fill his place in his species when no individual takes an interest in it any longer” (E & S, p. 705). When the one he loved most betrayed him, he could no longer live in the family group, not even in the country. His only

alternative was to give up his status as a citizen and family member and become merely a species member; to go back to his natural state and begin anew. When *Émile* was complemented with *Émile et Sophie*, the vicious circle was complete.

Thirdly, perhaps Rousseau wanted to show that a small family is very vulnerable without any social network; people who can encourage each other to hold onto ethical principles and to help each other care for themselves. *Émile* actually blames his tutor for having abandoned him and Sophie. The book *Émile* ends with the sentences:

As long as I live, I shall need you. I need you more than ever now that my functions as a man begin. You have fulfilled yours. Guide me so that I can imitate you. And take your rest. It is time. (E, p. 480)

In *Julie*, the family includes persons in addition to the nuclear family; both servants and friends take part in family life. But, even with this many people supporting each other, this story also ends tragically. Both stories show how important it is to keep the passions alive. Human relations are supported by sentiments; rationality is enough for managing material life economically, but friendship, education, and partnership are upheld by love. And Rousseau points out: “[O]ne must not cease being lovable if one wants to be loved always” (E & S, p. 697). Mutual respect and recognition uphold sustainable human relations. *Émile*’s *amour-propre* had received a very hard setback in *Émile et Sophie*, and the only thing he could turn to was his *amour-de-soi*. However, inflamed *amour-propre* brings about self- alienation (E).

Fourthly, the story might want to demonstrate that either *Émile*’s or, perhaps, Sophie’s education was a total failure. It was Sophie who betrayed, and this made *Émile* abandon his family and his native country. However, *Émile* read in “the depth of his heart,” that it was he who had earlier treated Sophie with coldness and realized that he had thus betrayed himself in the first place. Fifthly, when picturing people *Émile* and Sophie met in their desperate situation, the story might want to show how difficult it is to live a decent life when confronted with others’ biases. Others might judge us according to their prejudices before grasping the situation or might manipulate us into their own ‘bad’ habits.

The education Rousseau proposes is complicated because it is secretly controlled. Freedom and control are two political counterparts in Rousseau’s educational thinking. According to Gay (1966), it is a problem about authority, since Rousseau’s intention was to resolve the paradoxical tension between the sovereign and the

citizen. When humans give up their natural freedom for the common good, they become both the rulers and the subjects and start making the laws they then obey. Thus they remain masters over themselves and free, according to Gay. However, the way Rousseau describes how government has to transform individuals requires that the government directs them through its own conduct. Rousseau doubted that complete freedom was ever likely. Lanson nonetheless expresses Rousseau's idea like this:

[Rousseau] applies himself to transforming Émile's innocent instincts into reflective kindness, to have take root in him the spirit of liberty and the spirit of equality that will make him incapable of ever being oppressed or an oppressor. (Lanson, 1912/2006, pp. 20-21)

Émile should be forced to become a citizen by adopting general rules, but the complementary story *Émile et Sophie* showed that even if Émile had to give up everything else, no one could rob him of his freedom. The most important aim of Rousseau's education was not to teach Émile particular knowledge or skills, not even understanding or attitudes, but to live whatever life would bring about:

One ought to teach him to preserve himself as a man, to bear the blows of fate, to brave opulence and poverty, to live, if he has to, in freezing Iceland or on Malta's burning rocks. You may very well take precautions against his dying. He will nevertheless have to die. And though his death were not the product of your efforts, still these efforts would be ill conceived. It is less a question of keeping him from dying than of making him live. To live is not to breathe; it is to act; it is to make use of our organs, our senses, our faculties, of all the parts of ourselves which give us the sentiment of our existence. The man who has lived the most is not he who have counted the most years but he who has most felt life. (E, p. 42)

Educating the Will

Rousseau's "first principle of public economy" (DPE, p. 127) is the general will. Like a human body 'the body politic' is in a possession of a will, and this will is the 'general will' that is the 'voice of the people' and, in fact, also 'the voice of God' (DPE). 'The general will' expresses the common good and stipulates what is best for all members of the state. This 'body' consists mainly of many smaller groups, but their vested interests are not necessarily congruent with what is best for the rest of the

‘body politic’. A paradoxical problem, however, is that good governments need good citizens and vice versa, according to Rousseau. A government that strives for goodness has to lean on and be aware of the general will. It has to be distinguished from particular wills that are striving for singular ends and these particular wills need, therefore, to become congruent with the general will. Education is fundamental to bringing about this result; citizens have to be taught to be good by people they love so they can voluntarily choose to act in accordance with the general will that then becomes a duty. Rousseau was skeptical of having compassion for all the people of the world; he saw a limitation to human kindness. Instead, he believed in small states (like Geneva or Sparta) and making people loving their family members and their country.

From being almost a wild animal, the child has to become a member of civilized society. Inborn natural freedom will change to the freedom of an extended being. Rousseau obviously struggled with how to educate children to be autonomous and at the same time make them responsible citizens. In *Émile* he solves the problem by declaring that we have to choose either to create human beings or citizens; it is too difficult to combine these two aims. He thus first embarks on the endeavor of educating Émile to become an autonomously thinking and acting individual, and only thereafter a citizen. Rousseau’s so called ‘negative’ education is, however, not a freedom from direction or restraints; it can also be a freedom by force.

In the *Social Contract* Rousseau states that those who refuse to follow the *general will* need to be forced to be free, and in *Émile* he speaks about a “well-regulated freedom”²⁵⁴ (E, p. 92). According to Rousseau, individuals cannot contribute to the society without contributing to themselves and, thus, everyone’s wellbeing and society’s wellbeing are interdependent. Therefore, the general will is initiated from everyone as applicable to everyone. Freedom comes to exist in society when individual wills match the general will, and those who do not understand what is best for all have to be forced to act in accordance with socially accepted rules (SC) until they understand that obedience to the general law is a criterion of their own freedom (DPE). Human justice and liberty depend on the law: the social contract depends on mutual agreement and no one can put selfish interests above the law (ibid.).

While freedom is about willing, good education cannot miss its purpose; it has to encourage the development of the student’s own will. Education for independence

²⁵⁴ In French “la liberté bien réglée” (OC IV, p. 321).

and a will to be free promote happiness, since real happiness resides inside of us and cannot be removed by anyone else. Rousseau thus turned his attention away from his ills and searched for happiness inside himself, because “the source of true happiness is within us and that it is not within the power of men to make anyone who can will to be happy truly miserable” (RSW, p. 9). A goal of education must be to make responsible group members of the children; that is, to make them social, so they become equal and thus clear-cut parts of the whole. However, it is not enough simply to be a member of a group; another crucial purpose of education is to make the individuals at one with themselves. Humans must act as they speak, know what course they ought to take, and live in peace with themselves without internal conflict.

Rousseau did not offer a direct route to a good society, but he pointed out, instead, that education is a slow process that must begin when children are young. He also concludes that education should not destroy the ‘natural state’ of children and deprive them of their passions: citizens without passion will be worthless. Such passions are to be directed in the form of love for one’s country instead of toward other matters, so that individuals can identify with a greater and common whole and not concentrate only on their own desires (DPE).

Promoting simplicity and equality

The precondition for willingness is freedom. But what does this mean? Is forcing somebody to be free a contradiction? The dignity of humans can be realized only among free people, according to Rousseau. A government that wants respect and obedience to the laws from the citizens has to show them respect in return. Laws should be like guarantees of common freedom. A government that aims at justice for all members of society at a material level has to divide material possessions justly so that every one can live comfortably (distributive justice).²⁵⁵ This means, among other things, that the government has to prevent both accumulation of goods and poverty, and it has to promote respect for laws, patriotism, and responsibility to the general will (SC, DPE). Since the real world is limited, it is a human duty to be humane;

²⁵⁵ Rousseau’s argument relates to a current discussion between Axel Honneth and Nancy Fraser about whether critical theory should deal with recognition merely as an ethical concept (Honneth) or if social philosophy should aim at distributive justice (Fraser). See, Fraser & Honneth, 2003: *Redistribution or Recognition? A Political-Philosophical Exchange*.

therefore, it is necessary to restrict one's personal requirements (E). Rousseau heatedly argues for these ideas in a very long sentence:

The unequal distribution of inhabitants over the territory, when men are crowded together in one place, while other places are depopulated; the encouragement of the arts that minister to luxury and of purely industrial arts at the expense of useful and laborious crafts, the sacrifice of agriculture to commerce; the necessitation of the tax-farmer by the mal-administration of the funds of the State; and in short, venality pushed to such an extreme that even public esteem is reckoned at a cash value, and virtue rated at a market price: these are the most obvious causes of opulence and of poverty, of public interest, of mutual hatred among citizens, of indifference to the common cause, of the corruption of the people, and of the weakening of all the springs of government. (DPE, p. 134)

The principle of re-distribution has nonetheless been a problem in modern times, since politics and economics have been included in a global agenda, while interest in economic justice has not extended beyond national borders. And nature has been seen as a limitless resource to be exploited by those who have power and money.

In *Political Economy*, Rousseau's education follows another track than in *Émile*. This essay suggests that children should be raised together in public educational institutions. He argues that this is the only possibility for making them cherish each other and getting them to follow the general will of society. Such public education was most certainly what Rousseau had in mind, but the actual situation with such an education led him to write the experimental book *Émile* as a surrogate for the proper political education that deformed *amour-propre* had prevented (Bernstein, 1990). Rousseau held that the public education of his time corrupted youth because it strived towards two contradictory ends, fostering both individuals and citizens, thus failing with both (E). Rousseau criticized Jesuit education for not teaching children what is essential for life. They have not learned to separate truth from delusion, he said, although they are capable of an argumentation that disguises important issues beyond recognition (ibid.). Generosity, justice, moderation, human kindness, and courage are thus not familiar to them. Both the native country and God are neglected.

Rousseau has been criticized for choosing *Émile* from the aristocracy, but this was a strategic choice that he defended by claiming that poor children do not need any education because they cannot change the situation into which they are forced. Today this sounds very strange, but it has to be viewed in the context of 18th century rural living and of Geneva's handicraft society at the time. Rousseau highly valued

small city-state and rural living, handicrafts and farming; and Émile learned both an artisan's trade and agriculture. In a letter written many years before *Émile*,²⁵⁶ Rousseau also highlights his view of education. "I would not make them into either authors or office people. I would not train them to handle the pen but the plough, the file or the plane, instruments that make one lead a healthy, laborious, innocent life, which one never abuses in order to do evil and which does not attract enemies when one does good" (C, p. 552). This critique was a critique of existing practice. If we read *Émile* as a critique of social conditions in 18th century Paris, we can easily defend his choice of Émile as an aristocrat. In 18th century France social inequalities were enormous. Most people were poor and often went hungry, while the aristocracy and the churchmen were well off, and luxury and extravagance increased among the wealthy. "In general the upper classes despised the lower, and treated them with contempt and cruelty. The nobility looked upon the peasants as a lower order of life" (Eby, 1952, p. 312). It was common that upper class children demeaned the servants who took care of them (E). Rousseau saw it as his task to try to prevent the increasingly numerous bourgeoisie from copying the extravagant life style of the rich. In this situation, he believed that the obstruction to social improvements was the way the rich brought up their children and saw the biggest challenge in the education of the rich. In Rousseau's opinion, it was more important to educate the wealthy than the poor and teach the rich simplicity and to live a more modest life. He imagined (at least as a thought experiment) that it would be possible to adjust social conditions by an education that could change the behavior of the aristocrat's children and thus make new generations more humble; a virtuous circular process would operate and generate change. Yet, Rousseau also foresaw a revolution and said he wanted to prepare the rich for future poverty. With his gentle but incisive wit, Rousseau states that it is much more likely that the poor will become rich than vice versa.

The noble become commoners, the rich become poor, the monarch becomes subject. Are the blows of fate so rare that you can count on being exempted from them? We are approaching a state of crisis, and the age of revolutions. (E, p. 194)

Rousseau's *Émile* can also be seen as a critique of contemporary theoretical arguments, and thus as a general critique of Locke's political philosophy. In such a light, *Émile* becomes a polemic against Locke's liberal recommendation for

²⁵⁶ The letter was written to Mme de Francueil 1951.

economic individualism based on competition. According to Rousseau, the doctrine of capitalism endangered the development of a humane society, decent relationships, and equality. Therefore, children should learn to become unselfish and know what their immediate needs are, so that they can distinguish needs from superfluous desires. Freedom, then, is wanting only what is in the common interest of all, where the individual will becomes subjugated to the general will of all (see Spring, 2006).

6.4 Education about the Natural World

In the 18th century, belief in scientific truth gradually influenced education, but Rousseau found scientific investigations hazardous and claimed that they often lead students astray and that the possibility of such educational harm thus could outweigh searching for the truth, especially since the search for truth is so difficult (e.g., 1st D). When we find truth, he states, the problem of how to use it emerges as still trickier. “Are we, then, destined to die tied to the edge of the well into which truth has withdrawn?” (1st D, p. 16). When it comes to the education of children, there is only one science: the duties of men. To become good was the primary aim and Rousseau’s education thus ranks the development of morality and understanding of oneself above everything else. Consequently, Rousseau valued science as less important than virtue and he despised science in the form of theoretical speculation. Knowledge should be the result of experience not theories. Thus, from the beginning, Émile did not learn through others or by help of various books and technologies but needed to realize how authentic things actually function. He was not to become a source of faultily understood second hand knowledge; “the harm is not in what the pupil does not understand but it is in what he believes he understands” (E, p. 182). Émile ought to learn to judge things for himself before he learns how others judge them. It is false beliefs that are harmful.

The quality of his learning is much more important than the quantity; he should not learn things superficially but thoroughly. Émile has more or less to invent natural laws again by responding to his tutor’s ingenious but covert guidance and the sites for such explorations are nearby in the child’s own natural environment. “The issue is not to teach him the sciences but to give him the taste for loving them and methods for learning them when this taste is better developed” (E, p. 172).

Before he can start studying science or morals, he has to train his body and his senses. Émile's body should become robust so the senses are able to judge well. He should train his body by swimming, jumping, running, throwing stones, playing games like billiards and tennis, and develop his senses by measuring, counting, weighing, and the like. The tutor ought to put Émile in natural settings from early morning to late evening to watch sunrise and sunset, listen to the birds, and to enjoy the activities of wildlife. Moreover, Émile and his tutor even went outdoors in the middle of the night so that Émile could feel comfortable in darkness and in order to train other senses than sight, especially touch. The life of nature is in congruence with the human heart and has to be experienced directly. In addition to promoting experiences and studying science, nature is the only and original model for art and the child should thus practice drawing and explore geometry outdoors (E).

As was obvious in the two previous chapters, Rousseau greatly appreciated the natural world and liked to spend time in it. Natural scenery provided aesthetic experiences, but he speaks more highly about plants than he does about other elements of nature. Plants were absolutely his favorite natural interest. His zeal for plants reminds one of the descriptions of the creation Plato presents in *Timaeos* where the plants are akin to human beings. Rousseau does not describe how to study other parts of nature as profoundly as botany, but he emphasizes in *Émile* that the child should primarily be raised outdoors and should be allowed to run around and use his limbs to explore his natural surroundings.

Rousseau had two great interests that absorbed him, music,²⁵⁷ and botany. In the fifth and the seventh walks in *Reveries* Rousseau thoroughly expresses his liking for plants and conveys his interest in botany. He appreciated plants merely as living matter, for their intrinsic value, not because of the uses humans could make of them. Wandering around in nature led Rousseau to notice the diversity of colors, shapes, and odors. Botany "is a study of pure curiosity and which has no other real utility than that which a thinking and sensitive being can draw from the observation of nature and the marvels of the universe" (RSW, p. 156).

Rousseau makes it very clear that botany was an undertaking that diverted his mind and made him feel happy and peaceful. He loved to stroll in mountains, hills, woods, and fields searching for interesting plants. Nevertheless, he also found

²⁵⁷ I have left Rousseau's great music interest out of this book. Still, I regard music as a crucial ingredient in Rousseau's visionary 'system'; it was congruent with his love of a harmonious life in accordance with nature.

pleasure in studying them carefully with the help of hand lenses, thus exploring their structures in detail.

It is said that a German did a book about a lemon peel; I would have done one about each type of hay of the meadows, each moss of the woods, each lichen that carpets the rocks; in short, I did not want to leave a blade of grass or a plant particle which was not amply described. (RSW, p. 43)

I have already mentioned that *Émile* not is an educational manual, but Rousseau has contributed to practical education through his writings about botany. He diverted botanical interest from the herbariums and collections to the outdoors and introduced the study of botany to women and children (see BW; Kelly & Cook, 2000). He also organized and participated in botanical expeditions and communicated and exchanged seeds and plants with other both professional and amateur botanists.²⁵⁸ And although he preferred local flora, he was not totally unfamiliar with exotic, imported species. For practical reasons, he chose to follow Linnaeus' plant classification system built on the plants' reproductive organs (ibid.). When he first learned to use this system, he applied it very enthusiastically (RSW). However, he stated that Linnaeus' system is a good choice if one wants to study plants one already knows, but because this system is complicated, it is not suitable for novices (BW). Yet, he also showed an interest in other systems, especially the so-called "natural method" invented by Antoine-Laurent de Jussieu. In his *Elementary Letters on Botany* to Mme Delessert, Rousseau follows Jussieu's system (see Kelly & Cook, 2000).

Rousseau regarded classification as necessary when studying plants. Even if having knowledge about plants not is equivalent with knowing them by name, he argued that it is so much easier to develop knowledge of botany if common terminology facilitates the communication. To know names of the distinct species of plants is not enough, however; one also needs terms to make the classification possible. Rousseau realized that amateurs also have to learn the language of botany if they want to study plants methodically, and his *Fragments for a Dictionary of Terms of Usage in Botany* shows that he practiced what he preached and wanted to share his terminology with others. He rejected the arguments that botany only is a science of words that trains the memory to remember names. It must definitely not be allowed to

²⁵⁸ As earlier stated, Rousseau makes the distinction between botanists and herborists. A botanist is a scientist, while a herborist is an amateur.

become merely a science about words, he wrote. In the letters to Mme Delessert²⁵⁹ he explains that botany for children should include teaching them classification and structures, and train them to pay closer attention. However, Rousseau always placed authentic experiences before the words. Children need to learn to see before they can name what they see, he argued. In addition, while such education has to be fun, they also need to learn. Moreover, if one really wants to learn to know a particular flower, he recommends that they study it from a bud until its maturity fruit, thus following the entire unfolding of its growth. It was not practically possible for Rousseau to teach Mme Delessert and her daughter directly, so instruction had to take place through correspondence. However, he expressed clearly that he would have preferred to join Mme and her daughter to study the plants together in their natural locations. In his letters, Rousseau nonetheless tried to encourage and praise Mme's learning and to promote the teaching of her daughter (BW).

Botany was, according to Rousseau, suitable for all ages, an activity that calms the passions, nourishes the soul, and fills it with valuable sources of contemplation. As a method, he suggested a patient and not too ambitious start. Mme Delessert's daughter needed first to learn vegetal structures and the organization of plants to be able to go further in her studies: "It is only a question of having the patience to begin at the beginning" (BW, p. 131). So, Rousseau instructs Mme in detail how to distinguish plant families, how to differentiate the various parts of the plants, like roots, stalks, branches, leaves, flowers and fruits, and how to identify all parts of a plant, for example the corolla, petals, and pistils of flowers. He did not teach Mme everything with the purpose that she, in turn, should instruct her daughter in a similar way, but pointed out that children need to be taught in accordance with their age and gender (!) and guided to make discoveries on their own. Besides Rousseau, nature itself should be Mme's first botany teacher. Thus, she is advised not to consult books until she has become acquainted with the authentic plants. The instruments needed to examine plants are simple enough to fit in a pocket: a magnifying glass, a needle, and a pair of scissors. After studying plants for a while, it was time to begin a herbarium, and Rousseau gave careful instructions about procedures and needed equipment. Gradually the time came to learn the plants' names in Latin. A common language makes the correspondence with botanists from all nations easier and it is easier to avoid confusing species and using long descriptions, according to Rousseau (BW).

²⁵⁹ Mme's son Benjamin Delessert became an amateur-botanist and patron of the sciences (see, Stafleu, 1970).

Learning Latin as a part of botany studies was not pointless because then the language was for practical use.

There is sometimes an equal zeal in Rousseau's botanical undertakings as in his utopian visions of the good society. It is a lifelong²⁶⁰ passion pursued without compromise. In the *Seventh Walk in Reveries*, he wants to become acquainted with all known plants of the world. Starting from a few local plants, his ambition is to collect all the plants of the sea, the Alps, and all the trees of the Indies in his herbarium. But mostly he was more realistic. The minimum number of plant species Mme had to learn, according to Rousseau, was about 200. Nevertheless, he wanted her either to send the plants to him so he could identify them or to employ a gardener or apothecary who could show them to her, because "[t]o study nature agreeable and usefully, you must have its productions before your eyes" (BW, p. 172). Rousseau regarded nature itself as the best book about nature, and encourages studying plants without uprooting them. Empirical studies should come prior to theorizing and it was best for someone who was already familiar with plants to lead such studies. Even as an old man, Rousseau appreciated outdoor lessons by a 'master' and, besides instruments for studying botany, expeditions should also include an array of equipment to make nature trips pleasant experiences (BW). The expedition group had to be prepared to make coffee in the woods and for reading floras and other books, and playing games if stuck indoors because of bad weather.

With increased age, Rousseau gradually abandoned botanical books and classification guides: "Nomenclature and Synonymy comprise an immense and painful study: when one wishes merely to observe, instruct, and amuse oneself with nature, one does not need so many books" (BW, p. 215). Books are useful if one is willing to learn to observe, according to Rousseau, who dreamed of writing a botany book of pocket size. On the other hand, since one already knows plants, the only things needed to engage the alert wanderer are plants growing in the backyard and nearby. They offer pleasure to the solitary wanderer. When winter arrives and there are no flowers to find, the study of mosses and lichens begin. "[T]he greatest charm of botany is to be able to study and know the nature around one rather than in the Indies" (BW, p. 231). Having read too many books and collected too many plants, Rousseau realized that he had changed an amusement to an addiction something he regretted when old (BW).

²⁶⁰ Rousseau even says that he will herborize beyond death.

6.5 Educating for Love of Nature as a Reflection of Divinity

Nature is always honest, and humans are those who lie, according to Rousseau. Humans utilize nature and find signs and symbols for something that not is visible. Nature shows herself to humans as she is, and the first and foremost objects of study are plants (BW). The botanist studies their tissues, shapes, organization, life, growth, and other obvious aspects, and so did Rousseau. But, despite his trust in empirical knowledge, Rousseau often got excited and started to praise the elegance of all the plants that covered the earth. When a plant is dead it becomes merely organic, but before that, it exposes divinity:

[I]t is in the examination of this brilliant adornment, it is in the study of this profusion of riches that the botanist admires with ecstasy the divine art and the exquisite taste of the worker who fabricated the robe of our common mother.²⁶¹
(BW, p. 250)

Besides becoming aware of the work of God, Rousseau also saw nature studies and especially botany as a way of combating the passions and of feeling at ease with oneself:

The more the mind clarifies and instructs Itself, the more peaceable the heart remains. The study of nature detaches us from ourselves, and elevates us to its Author. It is in this sense that one truly becomes a philosopher; it is in this way that natural history and botany have a use for Wisdom and for virtue. To put our passions off the track with the taste for beautiful knowledge Is to chain love up with bonds of flowers. (BW, p. 173)

God has given plants as food to humans and other animals, not as drugs and remedies for disease (BW). The work of God has been careful, especially when it comes to the plants that serve as food. Therefore, he has protected the blossoming of important nourishments like legumes that have their seeds sheltered in pods. Yet, wild plants are those that came originally from God's hands, and therefore, Rousseau wants to study plants in the wild instead of in gardens. To feel most comfortable among plants, Rousseau did not want to think about earthly matters related to the body, like illnesses. He wanted to merge with all of nature. Rousseau sought refuge from an evil world in the bosom of Mother Nature, but he realized that this is not easy for all:

²⁶¹ To repeat, by 'our common mother' Rousseau meant nature.

To give oneself up to such delicious sensations, it is necessary only to love pleasure. And if this effect does not occur for all those who are stuck by these objects [fragrant odors, intense colors, the most elegant shapes], with some it is due to a lack of natural sensitivity and with most it is because their mind, too preoccupied with other ideas, only furtively gives itself up to the objects which strike their senses. (RSW, p. 59)

A great deal of sensitivity is needed to merge with nature:

The more sensitive a soul a contemplator has, the more he gives himself up to the ecstasies this harmony arouses in him. A sweet and deep reverie takes possession of his senses then, and through a delightful intoxication he loses himself in the immensity of this beautiful system with which he feels himself one. Then, all particular objects elude him; he sees and feels nothing except in the whole. Some particular circumstance must focus his ideas and close off his imagination for him to be able to observe the parts of this universe he was straining to embrace. (RSWs, p. 59)

Rousseau's religious thoughts deal with two principles. One is active, God, and the other is passive, nature. The active force of God is an absolute power and is what combines and modifies matter (LF). Being in nature was, for Rousseau, like being a child in a (holy) family; he was in the bosom of the kind and caring mother with the father watching over them.

6.6 Answers to the Inquiry

Below, first I will answer the secondary questions of this chapter and, finally in the conclusion, the main question. I will start with the first secondary question.

1. *What is the essence of a natural education, according to Rousseau?* This question asks for the ontology of Rousseau's educational credo. It is obvious that Rousseau built his hypothetical education in *Émile* on the foundation of human nature and thus on *amour-de-soi* as a natural inclination of humans. But, since humans cannot stay in the state of nature, he also considered how this naturally self-absorbed, though not negatively selfish, individual could extend its being and convert this self-centeredness into an altruistic and civil awareness. Rousseau elaborated this process using *Émile*, who was kept from prejudices and vices until he was old enough to

reason because Rousseau saw it as extremely crucial to first strengthen the boy's *amour-de-soi*. Émile's first task was to learn to know himself and to judge the world around him using his own body and senses; the second step was to make his *amour-propre* take a positive course, so he learns to love instead of hate, to long for virtue instead of vice. The essence of education was to learn what is right or wrong, and to learn to live both as an individual and as a member of society. Rousseau, however, did not believe that an individual could be morally involved with the entire world and become a citizen of the world but that one could become an active member of a smaller society and learn not only to understand the consequences of egoistic conduct but also to struggle against desires that could harm the common good.

2. *What did Rousseau believe that education could do to encourage people to adopt particular norms or rules regarding their relationships to nature?* The deontological aspect in Rousseau's education is interested in the keys to a natural education. When it comes to the education of Émile, the key is 'negative education' until the age of twelve. Rousseau did not want Émile to adapt social rules unreflectively but to follow nature and what is natural. After that he would gradually be introduced to society more to watch than to participate, so he learns to judge. The role of the nurses and mothers should be to love and care for the small children who thus learn through watching and imitating what it entails to be a social being. Since one learns to know one's self when mirroring oneself in another person, the educator's role is to show the children positive attention and to let them feel that they are recognized for who they are. Then they can build a decent *amour-propre* and thus receive an accurate picture of both their own and others' strengths and weaknesses and become capable of handling the struggles that always will reside inside of them.

The educator's role is also to trigger children's curiosity so that they can learn through their own experiences and start to ask questions about what they experience. The sites for education are mostly those in the natural world and learning takes generally place without books or equipment. The educator arranges learning situations and brings the child to exiting places and events; but it is the child who should be inspired to discover first-hand and to want to know instead of being told. Education should be useful, but childhood must not be sacrificed on behalf of future adult life. It needs to be a joyful time of its own during which the child learns useful knowledge, not knowledge learned for its own sake. Rousseau did not appreciate knowledge for showing off; he had other aspirations. Modern education that

promoted learning for showing that one is learned was definitely not Rousseau's interest.

3. *Can education promote conduct that is more in tune with nature and, if so, how?* While Rousseau has been seen as a spokesperson for the revolution,²⁶² it is interesting to reflect on whether or not he intended his education to actually make a difference. I will argue that he definitely did. The child should be forced to be free. Education should not be simple transmission, however, so that the children only repeat what the teachers have told them. They should be encouraged to become aware of prejudices, recognize injustice and inequalities, and seek what they sense is right. Rousseau not only wrote about how to educate the young, he wrote to make the adults (the readers) see things in another light, and thus start to combat their own prejudices and learn to become better persons. His writing style was a strategic choice, a stylistically developed adult education. He obviously wrote his books with the transformation of readers and perhaps of society as a crucial aim.

In this regard, Rousseau had a strong belief in education as a tool for societal transformation and wanted to point out the necessity of a new, innovative education that contrasted with the general practice of his time. Parry (2001) shows that Rousseau used education to solve central dilemmas in his political philosophy and thus became engaged in a *virtuous circle* where a transformed human being could create a transformed society that transforms humanity, and so on (see also Broome, 1963). This dream of an education that keeps a virtuous circle spinning is probably coterminous with attempts at purposeful education, since purposeful perfection of the individual has been seen as a means of a more perfect society, and vice versa. Value laden education, such as religious, political, and environmental education, is nourished by this kind of dream. The virtuous circle is in contrast with the *vicious circle* that reproduces present-day values and practices and thus 'corrupts' society (Parry, 2001). Social transformation demands that the virtuous circle is constantly re-constituted. Otherwise, it becomes a normative transmission towards a limited and predestined end. Given that Rousseau recognized the connections between the organization of society and the management of the individual (both self-mastery and education), a steady reorganization of many dimensions has to take place in order to change from a vicious to a virtuous circle. As question 2 (above) shows, transmission and transformation go hand in hand.

²⁶² How much Rousseau's authorship in fact influenced the revolution is questionable (see, e.g., Swenson, 2000).

4. *What are the aims of an education that promotes the development of more natural humans?* What Rousseau saw as the prime purpose of education is completely obvious. He stated this so many times. To perfect humans towards virtue is the main goal of Rousseau's education. Another very crucial purpose is to make them free. However, freedom is primarily a question of willing, so a good education is one that compels students to desire freedom. The general will is the average will of all citizens, the one that in the end serves the interest of all people without prejudicing any one. From the very beginning, children need training in virtuous behavior so the general becomes their sense of duty, a duty they will intentionally choose to act upon, according to Rousseau. With his view of education, Rousseau did not encourage people to strive for a heavenly life but, instead, to learn to enjoy a modest life, without wealth and luxury. Instead, he wanted people to live a life filled with marvelous experiences of the natural world in which humans sense their own nature and experience being part of a greater entity. He wanted to educate responsible members of society who are simultaneously aware of their own earthly limitations as natural beings among others.

6.7 Conclusion

The main question that this chapter tries to answer is: *What is the role of nature in Rousseau's educational philosophy?* Rousseau recommended an education that was in "accordance with nature" as the only true one for the human heart. Nevertheless, it is readily apparent that Rousseau's educational theory incorporates both normative and biased elements and it is definitely not free of problematic aspects. Rousseau's utopian education focuses on equality and justice. Does it really do away with the adult authority? And is the education proposed in *Émile* truly non-manipulative? The instruction of *Émile* undoubtedly depends on covert control. Rousseau probably did not want to sketch *Émile*'s education as the only alternative. However, he wanted to experimentally envision an education where the imagined child, *Émile*, should be as little contaminated by society as possible and thus have a chance to develop at his own pace. Delaying influences from other children and adults, the tutor restrains *Émile* from developing features that could make him behave improperly towards others. He is not allowed the chance to acquire social qualities in groups and to share belongings, strive for joint aims, or learn to follow shared rules. Neither shared

success nor failure become familiar to him. Rousseau foresaw that a natural education would not be easy (E). Yet, he wanted to propose a hypothetical direction, a vision of a better society, not to lay out an effortless road.

Rousseau states that humans can be happy if they solve all their contradictions and if everyone promote both their own happiness and the happiness of others (E). Humans pursue too many things and forget their basic task: to be humans. Therefore, education needs to endorse modesty and contentment. The educator's task is to unearth the intrinsic "human nature" from every individual and to encourage children to be what they intrinsically are: children! They need to live a happy childhood, without undue concern for the future of humankind, until they are mature enough to understand such adult problems. However, can isolation and manipulation lead to a contented freedom? If, according to Vanpée's suggestion, we read *Émile* without prejudice as a personal experience, it becomes quite possible that Rousseau was well aware of the paradoxical element in trying to endorse the development of the child's individual freedom with the help of the tutor's controlling power. With this method the tutor attempts to take responsibility for the child's upbringing without the open humiliation of corporal or psychological punishment, even though Rousseau also failed in depicting this as an ideal approach. The narrative *Émile et Sophie* that is a kind of dénouement to *Émile* illustrates both the successes and the failures of even an exceedingly well-intentioned education. This short story cannot be neglected, whether it was an afterthought or a dilemma Rousseau intended his readers to face. I agree with Schaffar (2008) that many practical situations require that the educator intervene in children's use of their own willpower, but this does not dissolve the paradox. One power still combats another, and then the adult, being more powerful, is usually the winner—for better or worse. We cannot always resolve the paradox if we start viewing it as a situated practical problem because many of the dilemmas involved are too far-reaching to be solved only in specific situations. They require following some general guidelines. In building these guidelines, the child needs help. The quest for sustainability is such a dilemma (or challenge), and in order to understand how to solve this dilemma, children need means more than ends.

However, human freedom is limited and no one has the right to meet their own needs at the expense of others' right to their freedom, which is why children have to learn that their own wants should not deny the right others have to fulfill their needs. The young do not automatically understand this, but need guidance that can steer their quest for, and right to, recognition in a direction that is best for all. While the

answer about what is “best” depends on various internal and external circumstances discussed earlier (especially in Chapter Two), the educator’s choices are difficult and rarely self-evident. Nevertheless, the adult is more experienced and thus has to be responsible for making them.

Émile’s education is definitely preferable to an aggressive promotion of moral behavior, but if a negative education is not achievable, we have to be satisfied with the second best alternative. Education is always responsive to some kind of a political agenda, but the more politically predisposed an education is, the more risky it becomes. A major challenge is that it is not possible to make education neutral because educators cannot escape their own values and children are easily influenced by such supposedly covert or tacit values. Children might be protected from prejudices until adolescence if they can be kept away from various influences, as Rousseau tried to do with Émile. However, this requires an educator who is uncontaminated by society, without any biases. However, Rousseau is very aware that finding a totally neutral and unspoiled educator is not very likely; in fact, to be honest, it is impossible. Even if Émile’s tutor was Rousseau himself, he is portrayed as an idealized vision of a teacher. Following Rousseau literally is not completely possible; one has to compromise. However, Parry (2001) is right when he states that Rousseau never given to compromise; he left that task to his readers. This is an identifying mark of Rousseau’s writing technique—he left the final tailoring to others. Yet, he argued that a zealous political education too early in a child’s life can have an effect opposite than is intended, and so can an excessively laissez-faire option (E). A caring and loving educator does not leave anything to chance. Since humans generally do not want to work on their freedom, the educator has to demand it (see Affeldt, 1999/2006).

Many people have read *Émile* as a credo for an education without discipline or restrictions, a progressive, child-centered education. But this was not Rousseau’s intention; he opposed both pampering and harshness and the child should neither command nor be commanded. Again, *Émile* does not contain definitive practical advice but, rather, offers thoughts for reflection.

While reflection and preparation precedes every trial of implementing hypothetical ideas, such preparation allows for many solutions. The possibility of successful implementation increases or decreases depending on the experimenters and the procedures they choose. Carefully considered, Rousseau’s manipulative education has pros and cons. As an intentional process involving development as well

as control, education is always situated on the line between freedom and indoctrination, and there definitely are many risky steps to consider—a condition that Rousseau sometimes fails to meet, probably intentionally. However, Heywood (2001) gives us hope when he argues that we never can underestimate the power of the child. Likewise, Uljens (2004a) argues that education would be most ideal if children could be influenced to learn entirely according to their own immature interests. However, he states that an individual cannot become a cultural creature without guidance. This is in line with Kant and his version of the educational paradox (see above). Humans are born free, but they need guidance to become civilized human beings and thus ‘humane’. I think faith in the power of education, even an imperfect one, was one of Rousseau’s visions. Children should be encouraged to autonomy, and they need to learn to recognize and avoid objectionable influences. Rousseau’s philosophy thus strives “to force the individual to change, to turn towards the possibility of humanity and freedom” (Affeldt, 1999/2006, p. 419). Total equality would secure the same amount of freedom for everyone; then no one’s freedom can be endless, and no education having such a goal can be without risk. Education always involves risk and the avoidance of risk creates two new risks: the risk of failing to develop critically thinking iconoclasts and the risk of preventing brilliant new ideas from emerging because of their uniqueness. Nothing changes without taking risks, and Rousseau confronted this human dilemma. Instead of blaming Rousseau for paradoxes and irrelevance, we simply have to take his paradoxes and allegories for what they are and open-mindedly make use of them in educational practice. Could such an attitude perhaps make Rousseau’s ideas more useful even today when the challenge of education is global equality and globally shared responsibility for both humankind and other parts of nature? I will discuss this question in the next and final chapter.

Part III

Back to the present

7 Rousseau, Foucault, and Contemporary Educational Challenges

In the beginning of this book I described the writing process as making a loop because the story ends where it started. This way of unfolding a story is also typical for voyage narratives, and for fictive voyages and educational novels (*Bildungsromanen*). However, this is a book and not a novel, and it describes an exploration that starts from the contemporary challenges of environmental education and sustainability and returns to the same urgent theme. I have traveled backward in time and visited spaces and listened to thinkers who have something interesting to add to the present discussion of sustainability in hope that it could lead to a deeper understanding of the topic and help answer my complicated research questions. So, the time has now come to return, wind up, and conclude the whole story.

The winding-up process starts with a summary of the findings from the entire study by following the trail of the book. As a second issue, I will discuss the relevance of these findings in depth; in particular how the urgent topic of human being's relation to nature and sustainability challenge both ethics and education. In the third move, I will evaluate my research strategy, and the fourth move is the final closure.

7.1 The Research Process and Findings

The central interest in this research has been the contemporary educational challenges of human being's problematic relation to nature and the quest for sustainability. The research has focused on the contradictory place of humans as a part of nature at the same time they are members of socio-cultural communities. My first attempt in this chapter is to briefly summarize the outcome of the entire research starting from the outcomes of the particular studies presented in the diverse chapters. Since each chapter ended with a long conclusion, this review avoids repeating details.

Part One

I started my study with the claim that education in most cases has not managed in tackling environmental problems adequately. In order to test this claim, first I studied how the relation of humans to nature has been dealt with in education and how education has been used to bridge the gaps between knowledge and action in relation to sustainability issues. The first focus in sub chapter 2.1 was, therefore, a study of the thematic educational endeavors called *environmental education* and *education for sustainable development*. The outcome of this particular study shows that environmental education has been developed and gained prominence over the last 40 years, but there is still much to do before environmental education has succeeded to the point that it become unnecessary and has reached a point where a balanced role for human life on planet Earth has become an integrated part of all education. Environmental education is a specific sub-field of education and not usually mandated. Thus, its influence on human conduct has hitherto been marginal. We know for sure that environmental problems have not diminished as a result of environmental education; too many people in the world still do not value nature or sustainability strongly enough to be willing to act appropriately. Even if it was possible to evaluate all attempts at environmental educational and to note positive results (i.e., more environmentally responsible conduct), the gap will remain until environmental issues become the focus of everyday action by all people. Many people know at least something about the state of the world and what actions are needed to overcome inequality and environmental problems, but they do not act in accordance with that knowledge.

After the study of environmental education in sub chapter 2.1, I entered on a philosophical quest and searched for the ethical obstacles that have made the relation of humans to nature so complex. So, in chapter 2.2 I identified a number of possible scapegoats. That study put on the table a few major issues that might have had an impact on humankind's relation to nature. These problems are various dualistic biases and educational shortcomings, but also Christianity and its vague and complicated message about the role of humans in relation to the rest of nature. As a final concern, the study also discussed whether humans' self-relation might be a crucial dilemma. The outcome of this second particular study was that it is difficult to find one single root or even a few definitive roots that demonstrate why the relation of humans to nature has developed in a direction that has caused contemporary environmental

problems. All these suggested scapegoats seem to be more or less interlinked and related to many other aspects for regulating human life and the natural world. Geomagnetic, climatic, and other physical factors influence life on earth, but so do politics and economics. The suspicion was raised, however, that environmental problems strongly relate to the last scapegoat, human beings' self-relation. This is a core that, in turn, relates to a network of other problems and shows how education has dealt with ethical problems historically. Therefore, I was motivated to further historical investigations and started to identify a broad-based condition involving the effects of power and control, a complexity that connect the present to both history and the future.

These intrinsic problems prompted me to a historical route whose outcome constituted the second part of the book, because I wanted to limit the study to a particular era and all threads seemed to have roots not only in Ancient history, but also in the Enlightenment and the modern project. Since the investigation suited for this study had to be one that could delve beneath the surface of both my topics, nature and education, I decided to choose two headstrong representatives of two different modern epochs to help me tackle the problems. After careful consideration, I chose to let Rousseau and Foucault take the stage.

Part Two

I created the approach of Part Two after having studied the most crucial of Rousseau's and Foucault's basic works. This second approach, as described in Chapter Three, is built on a set of methods I created with the help of Foucault's studies of genealogy and ethics. My study of Rousseau started by situating his thoughts in their historical, social, and philosophical contexts. Chapter Four thus describes the sources of Rousseau's authorship, not simply in order to search for roots, but also to show the complexity and diversity of the discourses that motivated Rousseau's thinking. In this chapter, the main question is *What discourses about nature, knowledge, and education inspired Rousseau?* My study of Rousseau's context is influenced by Foucault's genealogy and utilizes his regularity principles. While this particular study of Rousseau in relation to earlier and contemporary writers brought many unexpected connections to the Western view of nature and education, I had to allow the chapter to grow much longer than I initially had

intended. It became obvious that the concepts of “nature” and “natural” were powerful rhetorical weapons in Enlightenment discourses. Because these concepts had various meanings, especially as used by Rousseau, they generated debates and touched both individual lives and all of society. The modern European project made the entire natural world into a resource, and knowledge about nature became a powerful means for exploiting both humans and the natural world all over the globe. Rousseau was a zealous and exceedingly critical participant in various discourses about “nature” and “natural” and actively employed these concepts in a variety of ways.

After having recounted Rousseau’s context in Chapter Four, I started to study Rousseau more thoroughly by focusing on the role nature plays in his *ethics*. The study presented in Chapter Five was created with the help of Foucault’s ethics and it became apparent that Foucault’s methods were a good choice because Platonic and Stoic philosophy, as well as the biographies of Plutarch, all link some of Foucault’s and Rousseau’s thoughts, thus making it possible for me to ask ethical questions when analyzing Rousseau’s writings that are similar to those Foucault employed when studying Ancient sexuality. The main question of the fifth chapter is: *What were Rousseau’s ethics in relation to nature?* Through his diverse writings dealing with ethics, Rousseau showed how the modern project had complicated the human situation. With a glimpse of what a natural human being might be, Rousseau wanted his readers to step out from what he saw as artificial frameworks and to reflect on humans’ innermost needs and desires.

According to Rousseau, humans are in many ways a part of nature and their original conduct is in accordance with nature. Therefore, he wanted humanity to stand for ‘naturalness’ and moral conduct. To care about nature was, for him, a matter of caring about what is “natural,” and it was definitely something more than a matter of words. It meant becoming more natural in a kind of self-creative process and, thus, living in accordance with what is intrinsic to being human. Self-management was a way of freeing oneself from unnatural desires and of developing into a more perfect being, according to Rousseau. His intention was also to give visions of a virtuous life and to motivate his fellow creatures to strive towards ever-more perfect conduct. Yet, he did not believe that humans could ever reach a final state of perfection because only God can be unconditionally virtuous. The main task for ethical development, according to Rousseau, is to enhance mutual relations between humans so that every individual is treated with dignity and recognized as an equal being with the same

rights to freedom as anyone else. This entails that freedom is a right that everyone can work for and strive towards. Real freedom was, for Rousseau, the ability to manage one's own desires, an inner requirement that no one else can do. He wanted to trigger his readers to self-criticism, to reflect on themselves and their own lives in relation to the external world. As methods, he recommended self-training and education.

Chapter Six shows how Rousseau dealt with the topic of education and it follows a process that I worked out in accordance with the approach in the ethical study presented in Chapter Five. This time the main question was *What was the role of nature in Rousseau's educational philosophy?* When discussing Rousseau's ideas about education it is important to remember that he presented a hypothetical vision, not a prescription for action. As already stated, he did not believe that humans could ever become perfect, but he believed (or at least wanted to believe) that they are capable of moral perfectibility and thus wanted to show a vision of an education that could lead towards increasing perfection. Rousseau called his hypothetical education "natural" (e.g., E, p. 52), and this natural education had to be adapted to the child's own character. Until the age of twelve, education was more a question of holding back or fostering than of promoting the development of any particular talents. An education based on withholding rather than on supporting socialization and gathering of knowledge, he called *negative*.

But, the age limits in *Émile* do not need to be seen as actual (see Dent, 1988); the book also can be read as an allegory for an adult's self-education. What Rousseau wanted to point out was that humans from an early age become contaminated by the prejudices of others and thus start to reproduce vices they have learned from others. Therefore, the educator's task is to encourage children to be what they intrinsically are; to let them live happy childhoods, without concern for society or the future of humankind, until they are mature enough to understand such problems. This does not mean that he wanted the children to be 'spoiled' by permissiveness; quite the opposite, he taught that human freedom is limited and cannot be extended at the risk of others' reciprocal right to their own freedom. The supreme aim of education is that students should become free and should allow others their own freedom, as well. Humans need to learn that the fulfillment of their own desires must not hinder others from similarly fulfilling their desires. Everyone's rights as part of humanity are equal; therefore, everything is not available to everyone, and one's desires need to be limited by mutual concern for the desires of others. The young do not automatically

understand this; they therefore need guidance that can steer their demands in directions that are best for all.

Rousseau liked to express his critical thoughts through paradoxes, and he noted the paradoxical task of education: it has to both allow the other's innate freedom and make the other free. He argued that people have to be forced to be free. This can be interpreted as the duty of teachers who care for their students by encouraging them to care for who they are so they can become responsible and committed citizens who care for the good of all. According to Rousseau, a good citizen is a decent person who treats her or his fellows, family members, and friends well. Education starts from birth and self-education throughout adult life is a basic requirement of a more just society in which everyone is prepared to participate in the creation of a good society for all. So, what Rousseau pleaded for was actually a lifelong moral education. I will return to this issue soon, because after this summary of the particular studies described in Chapter Two to Six, I will now present the findings that will answer my main question.

7.2 The Main Research Inquiry

The main research focus of the entire book was, (a) *What ethical dimensions are challenged by the enigma of sustainability?* and, (b) *What kind of education do these dimensions require?* Since the approach has been stepwise, I will use the findings from all the other studies to answer this twofold question and emphasize my standpoint. The answer to the first part of the question is that the enigma of sustainability challenges three human dimensions. These three dimensions are similar to three spheres of an individual's personal and social development that Sauvé (1999) distinguishes: (1) the sphere of the self, where people develop their own identities; (2) the sphere of otherness, where an individual interacts with others; and (3) the sphere of one's relation to the biophysical environment. Of these three spheres, she sees the third as the basic sphere for environmental education; however, it is conveyed through the second sphere of social relations. The three dimensions of sustainable development (ecological, economic, and sociocultural) overlook the sphere of the self. The earlier, popular normative models of environmental education (see Chapter Two) noted that problems on the individual level often neglect the social influence; however, the problem of improper actions is not avoided if we abandon

normative attempts and thus also neglect the individual sphere. Environmental problems are due to what takes place on the individual, social, and ‘natural’²⁶³ levels. Humans shape their relation to nature *through* their view of themselves, of others, and of the entire planet. These ethical dimensions are, however, not separate or hierarchical; all the three interact. This is the answer to the first part of the main research question (a) in this book: *The sustainability enigma challenges humans’ view of themselves, their view of others, and of the natural world.*

Another point Sauv   (1999) raises is that environmental education has to be integrated into formal education and she therefore calls for partnership in the educational community. This call for integration is not unique in debates about environmental education. However, my claim is that educational integration is not enough. Should it not be of fundamental importance for humans to learn to live together on the earth? Is it a primary or a secondary concern to make life on earth satisfactory for all humankind?

The sustainability enigma calls for an education that encourages a good human life, with well-functioning and decent communities adjusted to existing physical circumstances. It needs to be an intrinsically ‘good’ education that is an education that is good for its own sake (see Chapter Two). Such an education makes a difference, and can promote self-transformation. This is, in short, the answer to the second main research question: (b) *Environmental awareness is a basic educational concern and needs an education that offers both basic and diverse knowledge about the world, but also that triggers self-transformation through ethical reflection and mindfully responsible action.* What an acceptable life is on all three dimensions (individual, social, and natural) is the task of education to reflect on and discuss. How to move from theories to practice is another. To describe the conclusions of my complete study more precisely, I will now present the three ethical dimensions and simultaneously discuss some basic educational principles that the sustainability enigma challenges.

²⁶³ Instead of using Sauv  ’s *biophysical environment* concept, in the following I will simply use the words “nature” or “the natural world” as synonyms to her concept.

The Sphere of the Self

The first ethical dimension that is challenged by the sustainability enigma is *the self*. According to Rousseau, humans have cut themselves off from nature and have taken control over the whole planet. In addition, they have started an endless race among their own species (see Lévi-Strauss, 1973/2006). By neglecting the common good and taking self-interest as the highest principle, human conduct has promoted a vicious circle, according to Rousseau. The price for this vicious conduct is that humans have lost their selves. Following both Ancient philosophy and Rousseau's and Foucault's interpretations, the first human task should be to know one's self and to learn to care for the self in order to understand one's role as an unique person in both society and the natural world. All parts interact and every move has an impact on all the other levels. Humans jointly create economics, politics, culture, and other interactions, and all these common undertakings have an impact on individuals as much as on the natural world.

Following Foucault (2005), the biggest error of history was basing human conduct merely on knowledge (*connaissance*), and when humans gave up searching for the truth through self practice and active self-transformation. The 'care for the self' and 'care of others' were replaced with 'knowing the self', others, and the whole world, but not on understanding one's innermost being and relation to the world. Yet, all of Western civilization is still stuck in that mistake. Unless humans can learn from the consequences of their own errors, even on a personal level, and find their way out, they cannot create an education that prioritizes a more equal sharing of the world. To protect one's private space is to protect one's freedom, to be connected to one's thoughts. Care of the self is the foundation for care of others and of the natural world. If humans treat themselves and their own kind like objects, they also treat the rest of nature the same way.

Foucault (1967) saw his epoch as one that not only has to deal with whether there will be enough room for all humans to live in, but also whether there are places to sustain all the elements for being human. He saw an increasing risk that the sacred limits between family space and social place, private space and public space, and space for leisure and work all have become more and more stretched to the breaking point. The concept of "governmentality" was Foucault's term for how human life becomes infiltrated by power constellations that are meant to govern so effectively and secretly and that control so cleverly that humans believe that they act out of their

free will, thus becoming alienated from their true selves. Rousseau's education of *Émile* can also be seen as representing such a system, since he theoretically talked about freedom, but in practice manipulated the child covertly. While *Émile* and the *Social Contract* depicted ideal people and ideal worlds, Rousseau found himself trapped in his paradoxes and showed how dangerously narrow the separation is between manipulation and freedom.

Humans are born with an inclination to be free, but they are dependent on their fellow beings for their mere existence when young. Educators can forge a path to freedom in the sense that the students are led to understand their weaknesses and strengths in relation to other humans and to the rest of nature. According to Rousseau, this means that humans need to learn what their basic needs are as humans and to base their decisions on their own elementary needs. They also must understand the need to restrict their needs if their own needs deny anybody else's needs, since every one shares the right to fulfill their freedom as fully developed humans. Yet, freedom also entails freeing one's self from bonds that enslave—both one's unrealistic desires and pressure from others. This freedom depends on self-understanding. In contemporary society, various kinds of social control have become ever-more plentiful and sophisticated. Various commercials and communication technologies help support this governing system, since they come between humans in the most intimate of ways. Even with a long educational tradition, today human communication and interaction seem to be more controlled than ever before; controlling mechanisms are with us nearly everywhere. Other persons are reduced to words, pictures and voices, and the totality of being humans disappears. This system is at the same time transparent and closed; many secrets are exposed while others remain hidden. The methods are both weak and strong, because no one is protected from abuse, while criticism becomes ever-more powerful.

The initial human right to freedom is threatened daily since influential powers intrude into homes, schools, and young children's innermost intimate worlds and interfere with the creation of their self-image. Computerization leads children directly into the cyber world of hyper-reality. Bauman (2007) is anxious about the trend of living a second life on-line, a life where individuals market and sell themselves like objects to attract recognition. He describes this as *subjectivity fetishism*, a condition where humans have to steadily search for being recognized as either extraordinary or as living up to a particular standard (being normalized). Rousseau would have said that young people today are made 'slaves' in a very early age. They become slaves of

both the marketplace and their own desires. The phenomenon is another example of what Foucault called “governmentality.” The young generation is being incorporated into the world economy, and they do not know what their own will is in relation to the will of others. The more unrestricted freedom society allows its children, the more these methods will demolish the creation of pure self-consciousness and limit the possibilities for developing into free, mature beings. Unrestricted freedom will not facilitate the struggle for the wellbeing of nature and a common good life that offers equal opportunities for people all over the world. When adults cooperate in all kinds of businesses that influence children’s needs and desires, they collectively reject the innate right of children to freedom. Rousseau kept *Émile* apart from society and bad influences until he was mature enough to judge what was taking place around him. The aim of this holding him back was a step in the education of *Émile* towards freedom.

An adult cannot purposefully withdraw from society for self-education. Individuals are never free from social pressure. However, like Jesus (if we read *Sermon of the Mount* as an allegory and symbol for reflection) or Rousseau’s alias, the *Savoyard Vicar*, humans can step aside and reflect on themselves and their own undertakings and try to free themselves from prejudiced and biased influences. “It is a matter of placing ourselves at a point that is both so central and elevated that we can see below us the overall order of the world of which we ourselves are parts” (Foucault, 2005, p. 282). Humans who are in contact with the whole universe and who contemplate the processes and secrets of nature can control their actions and their own thoughts, according to Stoic wisdom. With the concept of “thought,” Foucault meant just this human ability: that humans can step back from a particular way of reacting or acting in order to analyze their own conduct objectively and to question its meaning, goals, and conditions. “Thought” is no inborn *a priori* talent, but a reflective action that generates freedom and self-transformation. And self-transformation in form of care of the self includes the difficult task of *unlearning* and becoming rid of bad habits learned from parents, teachers, and other influences. Rousseau wrote about ‘negative education’ because he knew that unlearning is more demanding than learning new talents. In line with Foucault, the most crucial human undertakings are based on personal self-transformations combined with the cooperative invention of better modes of life than those that have failed. However, this can only happen when humans dare to look back at their past actions, identify their errors, free themselves from the traps of prejudice, and search for new solutions.

A non-sustainable life has not come about all of a sudden and will not be overcome without effort. We cannot build an equal world, one that is culturally and socially sustainable, without getting to the foundations of both our self-relations and our relations with others. “A reflexive relationship to oneself can be constitutive of a morality understood as an aesthetical style of living, but only a relationship to another person can give it an ethical meaning” (Oksala, 2002, p. 278).

The Sphere of Social Interaction

The second dimension that is challenged by the sustainability enigma is mutual relations among humans. Rousseau’s concepts of *amour-propre*, ‘extended being’, and ‘perfectibility’ do not refer to contemporary psychology but can still be used to discuss present-day social troubles in relation to the idea of sustainability. Contrary to Rousseau’s thoughts, it is now widely known that humans are intrinsically social animals. Like other animals, small children enjoy spending time in nature where they have so many opportunities to use their entire body and all their senses. But, from the first, this happens in mutual relations with siblings and others in the child’s vicinity. Unlike most other animals,²⁶⁴ humans have an inner force that extends them forward, and education builds on this principle. Humans are willing to improve themselves and learn not only to become proper members of their society by adopting its rules and common ways of conduct, but also because they want to improve and thus ‘become more than they are’—sometimes in a way that can work against the sense of community. It was also Rousseau’s opinion that humans are easily dissatisfied with their own existence and that they therefore want to become better than they are. In Rousseau’s opinion, this makes all of life paradoxical since humans have to continuously struggle between being unique and being ‘somebody’, or vanishing into the masses and becoming ‘nobodies’. In *Émile et Sophie*, he demonstrates the problem of creating a decent life in solitude and pointed to the need for the support of others. Marginalization and distress are always at risk for those who go against the tide. Most people might know that it is right to act responsibly towards the earth, but they do not; they may even denigrate those who chose another concept than the

²⁶⁴ Contemporary researchers are investigating animal intelligence and learning. Plotkin (1994) argues that many animals can think rationally and have a culture through which they share knowledge.

money-oriented. However, an education that strives for a good self-relation strengthens the inclination to act responsibly.

The education of Émile was not intended to be a precise route towards a given end; his education aimed at making him ready to face various possibilities and to manage whatever eventualities arose. This is actually also in line with Klafki (1997a, 1998) and Scott (2009), who want education to focus on building capacities for living in a future world, even if the world of tomorrow is unknown. The crucial variable, then, is how humans live together (ibid.) and how they adjust to changing physical and material circumstances. But it is not only about adaptation. When Rousseau and Foucault talked about self-training, they meant that humans can purposefully step aside and reflect on the conditions of which they are a part. Does this mean that one has to become more critical? In one sense yes; but in another sense it entails something more. Criticism can easily be directed against problems that others cause and thus blame other persons for their irresponsibility and systems for their malfunctions. Another kind of criticism sees every subject as part of a larger complex, one in which everyone's power and choices also impact general customs and general conduct. Such criticism thus incorporates self-criticism and a will to change not only the common rules, but also one's personal conduct. Yet, mutual recognition can enhance each individual's moral improvement.

The self-centered individualism of modern Western culture is well recognized. However, Rousseau's ethics calls attention to the need for mutual recognition. To feel most alive, humans are dependent on social recognition; but when humans' craving for such recognitions grows limitless, they start attempting to become everything to everyone, instead of experiencing their own existence as limited beings. Humans need to improve, but this need can easily steer them in the wrong directions, making them search for fulfillment of their desires in ways that makes them still more miserable and even less alive, according to Rousseau. A problem is that humans are too easily misled by false attachments and illusory hopes and thus do not understand the limits of their extension; they want to be more than humans, he argued. For example, in the 2nd *Discourse* he claims that civilized humans want to be the sole master of the entire universe. He thus asked for moral reforms that could reshape human understanding and ambitions. Beneficial recognition affirms the other as a unique being with intrinsic and equal rights to live and be loved. Affirmative recognition nourishes virtue, according to Rousseau, whereas negative recognition makes humans self-alienated; they start looking upon themselves as strangers (RSW).

One way of resisting such indignation and insult is to escape the other's evilness by choosing solitude, becoming invisible, or by changing oneself according to others' requirements like a chameleon. In its most developed form, the concept of "recognition" entails acknowledging another as having the equal right to be free and use her or his particular potentials for the common good. It involves a reciprocal process where individuals grow as a result of looking at themselves in the mirror of another human being. They learn to love when love is reflected.

Humans can be encouraged to act independently and make good choices. Sustainability can, nevertheless, not be forced on people. It has to be their personal preference in order to make sense to them. Like Émile's education, therefore, the end has to be left open. According to Benner (2005), Rousseau and his followers in the German *Bildung* tradition (see Chapter Two) have emphasized educational approaches that are neither uncritical nor critical, and thus neither based on tradition nor on promoting a particular position (e.g., a particular political view). These theories do not merely focus on teaching and learning, but also on *Bildung*. The French Enlightenment influenced German educational theories developed during the 18th and 19th century that applied the concept of *Bildung*. The concept is difficult to interpret but can be described as a transformation that takes place both individually and by interaction in social contexts. However, in this tradition, the crucial role of nature that Rousseau defended has been lost (see Peltonen, 1997; Wolff, 2006b, 2007). Likewise the entire educational endeavor has lost the self-transformative principles that once were obvious in the *Bildung* tradition. A reconstructed *Bildung* tradition could have much more to offer education that struggle against the effects of unsustainably living if the three dimensions (the relation to self, others, and the natural world) I have described were all emphasized.

As an answer to the educational paradox that Rousseau raised, also influenced by Kant, Herder, Fichte, and Schleiermacher, Benner (2001) promotes an education that he calls *non-affirmative*. The principle of this educational approach is neither dogmatic nor anti-authoritarian. It is an education that sees the students as individuals who are given opportunities to advance (*Bildsamkeit*²⁶⁵), but the capacity for maximum growth requires outside aid. Without education, individuals would not know enough to claim freedom (Uljens, 1998, 2002). Humans not only need to be

²⁶⁵ *Bildsamkeit* has no direct translation in English; a near concept is "educability." However, *Bildsamkeit* relates to a person's capability to be actively involved in a process, not only a person's capability for being educated.

provoked towards freedom, they have a right to it. However, for any advancement to happen, the students have to want to take part in the educational process. The entire educational processes take place in interaction with an educator who gives the student recognition as a person who has the potential for growth, and it *provokes* the learner to participate actively in the learning situation (Benner, 2001). The teacher is the one who, as Rousseau said, “pushes” the students forward and ‘provokes’ them to become responsible in their own learning process. This idea leans on the belief that humans are innately free and thus unpredictable. However, the provocation to learn is also possible without a teacher or master. Children can even provoke each other; but, I will claim, it is almost impossible to provoke oneself without influence from somebody even if only indirectly (e.g., watching others can provoke to actions). Humans have the capacity to change, and that change can be both self-initiated and steered by other sources (Benner, 2005).

It has always been seen as desirable to intentionally change persons when they are most malleable; but a non-affirmative education strengthens the students’ own capability for actively developing in their own direction by taking charge of their own will. Such students are thereby provoked to both self-direction and transformation that go beyond instruction and that encourages questioning the teacher’s view of the world. The educational task is to strengthen the will of the students to question and deliberate and that encourages them to independent experimentation and trials. The students are encouraged to adopt a critical position both towards themselves and regarding the various contexts in which they find themselves (Benner, 2005). According to Benner, the role of education is not only to prepare for a profession and a life in a productive economic system, education should also promote the shared life of humankind and, thus, the welfare of the planet. In that situation, various forms of human practice cannot be separated and hierarchically ordered; thus, as Benner suggests, education, ethics and religion have the same importance as politics, economy, and art (ibid.). By avoiding distinctions according to disciplines, education avoids prioritizing any human interest over others and thus empirical, theoretical, and aesthetic knowledge are regarded as equally important. That all human fields of practice are equal interesting, but this “equivalence theory” also has to be understood in relation to context and temporality and raises questions about whether the economy today or tomorrow is more important, and in which parts of the world the protection of nature is most critical.

The global, political and economical systems become more and more interlinked and so complicated that the average being, lacking in economic or political insight, cannot understand how these systems work. In particular, the world economy is too complicated to understand without an education in economics. It is hopeless to try to promote change without understanding how things interact, without questioning the fundamental systems and values on which our society is built. Sustainable development is visualized through three dimensions. *Ecology* relates to harmonious conditions in nature, *economics* to human labor and use of resources, and *sociocultural* to human traditions and interactions. The three dimensions are not comparable. Ecology is the study of ecosystems; economics is a science and an activity that is a central part of the sociocultural dimension.

Many theorists have tried to identify various forms of human practice by which humans search for meaning in their existence. For example, Friedrich Schleiermacher distinguished labor, politics, education, and religion; and Eugen Fink highlighted labor, play, love, death, and mastery (Uljen, 1998). Benner (2005) divides human practices according to the six aforementioned non-hierarchical basic phenomena: economy, ethics, politics, art, religion, and education. All these fields of practice span ages and generations; they coexist in complex patterns but seldom harmoniously, and they are neither predetermined nor hierarchically ordered. These six fields of practices are articulated in turn through four existential forms: a corporal form (*Leiblichkeit*), freedom (*Freiheit*), historicity (*Geschichtlichkeit*), and a linguistic form (*Sprachlichkeit*), according to Benner (2001). These four forms explain human existence as limited by an organic body; not as a machine, but as a sensitive and concrete being that relates to itself and others on a corporal level. Freedom offers possibilities for choosing and influencing human history and interacting with others through various forms of language (ibid.). Such freedom, however, is not total because humans interact and influence each other. To be a citizen is a privilege, not a punishment, but it is also not to be taken for granted. As with other good things, it comes at a price, and that price is commitment, responsibility, and participation. One's interests cannot be promoted at the expense of someone else's interests. Rousseau's "social contract" was a commitment to the importance of considering everyone's interests.

Education that challenges sustainability and combines ideas of Rousseau, Benner, and Foucault can be described through the hour glass metaphor as an education that, firstly, cares about the presence and develops a critical ethos towards daily life and

one's world today. Secondly, such an education emphasizes problematizing the past and questioning old myths and errors that confuse our present situation. Thirdly, through discussions and vision the future is problematized. The world is faced through diverse perspectives, such as micro and macro, close and distant, familiar and strange. Neither science nor history are taken as the full truth, but are critically compared with actual politics and ethics. Theories are juxtaposed with practice. However, social problems have to be reshaped to suit the educational situations that give students possibilities for participating (Oettingen, 2001). Rousseau shaped visions while Foucault was a non-utopian; a compromise could be to create *concrete utopias* that face the sustainability enigma with current and real prospects.

Even if utopian, Rousseau did not believe in any fixed governmental system since human conditions do not support any persistent world order (SC). In his vision of a virtuous circle, the circle is constantly reshaped. Thus, even if he was a vision shaper, he was obviously aware of what could be called a major myth of both politics and education: the myth of progress towards a perfect human state. "A man has been made for a community of equals, but has not found it. Can we image a community that is made for men?" asks Kelly (2008) interpreting Rousseau. Probably not; Kelly calls Rousseau one of the greatest realists ever, and although many have called him a philosopher of hope, his profound faith was often negative. There is no original sin and human nature is good. But, when living in a society, other's opinions are so influential that a person becomes depraved. The individual becomes overly influenced by other opinions and thus gradually becomes corrupt.

Rousseau and Foucault both believed that neither most people nor the entirety of humankind are capable of becoming morally perfect but that they can transform themselves and make their common living conditions better. The perfect human was, for Rousseau, a vision to aspire to, and the 'practice of freedom' Foucault maintained in his late days also gives hope of the possibility of moral improvement. Without vision there are no lights illuminating human roads; life becomes a matter of random choice. Yet, because Rousseau shaped views of an unrealizable ideal, people interpreted his thought differently. When trying to shape concrete conditions from idealistic models, the direct result may turn out dangerously. His models are not meant to be more than thought provoking. Benner's view of human activities as non-hierarchic encourages multidisciplinary approaches in education. Nonetheless, I do not think all human activities can be put on the same, equal level because the foundation of everything else is humans' undeniable relation to nature.

Education has to strengthen the understanding for what it means to be a biological creature that has the natural world as its habitat. However, it is the role of education to encourage discussions about how human life should be lived in order to be good and about whether sustainable development is a good aim, given the contradictions it faces. On the one hand, humans hear that they have to act responsibly and decently towards all people of the world and towards the entire earth, and have to save resources and live simpler lives. On the other hand, they need to consume to keep economic production dynamic. It is not possible to attend to a vicious and a virtuous circle simultaneously and to promote sustainability with one hand and non-sustainability with the other.

The Sphere of the Natural World

The third ethical dimension that is challenged by the sustainability enigma is *the natural world*. Along with the shift of discourse from nature conservation towards sustainable development, the center of attention in politics has turned from nature to society. In *Caring for the Earth* published by IUCN, UNEP, and the WWF 1991 the interpretation of the concept “sustainable development” is “improving the quality of human life while living within the carrying capacity of supporting ecosystems” (p. 4). This interpretation highlights humans’ dependence on nature and differs from the focus on human needs proposed by the Brundtland Commission: “Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). In the beginning of this book I declared that I would employ the word “nature” as a basic concept since my opinion is that it has been neglected and sometimes nearly banned in discourses about education for sustainable development. The healthy operation of nature is, however, a precondition for a vital human life. Many other species can survive humans but still are very vulnerable to environmental change and need clean water and fresh air. Willamo (2005) asks whether we can learn to understand the principles of sustainability if we do not understand our own basic nature, if we forget that we *are* nature. Following Rousseau, it is not enough simply to understand that we are nature: we have to intensively *sense* it and actively work on it.

As shown in Chapters Two and Four, humans have a tendency to split their own being into soul and body; they then neglect the bodily element and typically treat it as merely a package for the soul (even if this package has to be as handsome as possible). Denying that humans are part of nature complicates human life and makes it more difficult for humans to support the survival of the entire earth. Rousseau talked about the soul and the body as indistinguishable and he emphasized humans as part of nature. Later research has made it abundantly clear that a human being is an animal among others. Humans are nature, they are animals born with an instinct for self-preservation, just like other animals. Rousseau called this instinct *amour-de-soi*, an instinct that entailed a ‘self-love’ as a kind of ‘desire to be’²⁶⁶ that guarantees one’s self-protection and survival. Even after Darwin and many others have tried to show that a human being is an animal, the fact has not been generally accepted; it has been a hard lesson to learn. Rousseau maintained that humans are born with sensations, and to sense is to live and to be aware of one’s own existence. To respond to these sensations is to act ‘naturally’, according to Rousseau (E). He therefore, stressed that children have to be offered possibilities to use, train, and strengthen their sensory capacities before the influences of others begin to corrupt them. Rousseau opposed making children marionettes that mindlessly act out adult’s whims and prejudices. Education implies avoiding harmful influence on the children and encouraging them to use their senses and their bodies (E).

Rousseau recommended an education that lets children be childish, strengthening their senses and limbs, and letting them largely act on the basis of their spontaneous perceptions. The period Rousseau reserved for this ‘negative education’ is childhood, but he also stressed the need for adults to withdraw from society in order to avoid social influences and superfluous desires and, instead, to enjoy a solitary existence in natural settings. He saw the countryside, mountains, lakes, and fields as retreats into the self. Rousseau’s own experiences made him believe that it is natural for humans to go on foot, rest under a tree, and eat uncomplicated food produced in one’s own neighborhood. He did not see it as a retreat to a more uncivilized state but a slowing-down needed to become aware of one’s being and to learning how to enjoy life more thoroughly. At the same time he saw the solitary life as a way of reflecting on one’s self as a person, of elaborating one’s own ideas, and of taking care of one’s self. It was not a flight from responsibilities, a passive ‘letting go’, that Rousseau

²⁶⁶ Cf. “libido,” a psychoanalytic concept used by, e.g., Sigmund Freud and Carl Jung and “Eros,” from Greek mythology used in philosophy by, e.g., Plato and Herbert Marcuse.

recommended—except in his later days when his reveries almost read like surrender. In his old age, Rousseau simply recommended a lifestyle in harmony with nature, a kind of lifelong enjoyment of one's own existence that ignored the competitive pressures of society.

“Nature” is much neglected in today's education as a topic for its own sake, and the role of humans as part of nature is likewise ignored. The natural world has become a resource for human use and humans have given themselves the right to decide the destiny of other species. Rightfully, Bonnett (2007) questions the kind of sustainable development that is focused on sustaining nature for human exploitation and aims instead of securing possibilities for humans to improve themselves and to develop their ways of dealing with the whole of nature. At best, humans want to improve on behalf of the rest of nature. Then “perfectibility” is taken as a technical term rather than a moral one. But, according to Rousseau (e.g., RSW) and Bonnett (e.g., 2007), humans need to learn to *love* nature for its intrinsic value. And nature resides inside every human being. Nature's intrinsic value has often been raised as a feature of environmental ethics, in contrast to the basic principle of sustainable development, namely the human-centered *anthropocentric prejudice* that is deeply rooted in Western society. According to this prejudice, humans can ignore other organisms' needs for appropriate habitats and life supporting conditions when they interfere with human life. Without doubt a problem hides in the concept of sustainable development.

7.3 Evaluation of the Research Approach

At this stage it is time to step back and evaluate the complete research process and critically discuss certain interesting findings. There are many alternative ways that I could conclude this research. I could have just *described* what Rousseau, Foucault, and others have said as objectively as possible in relation to my main question. Or, I could have tried to *interpret* their sayings in an accurate way. A third alternative could have been to try to *juxtapose* them or to *confront* them with each other to create either excitement and conflict or consensus. A forth alternative could have been to attack them *critically*. As a fifth way of ending, I could have used the texts to lay out blueprints and to prescribe how best to protect nature and to promote sustainability through education. However, instead of these alternatives, my strategy has been to let

the findings *transform* my own understanding of what possibilities these texts can bring to our contemporary situation. Consequently, it is not the texts themselves that have guided my writing, but the thoughts they have inspired. I have attempted to put urgent questions on the table and to use history as a mirror for the present. I share Rousseau's and Foucault's conclusions that available theories need to be reshaped into practice by the practitioners themselves. Ethical principles and practical advice seldom fit between the same covers. Theories need to be reflected on, discussed, and implemented in accordance with the particulars of situated contexts.

My first strategy to approaching nature and sustainability in relation to education was to examine how education of the previous decades has dealt with these issues and to study a few possible causes for the unsustainable status of the world we face today. This first approach showed many educational weaknesses and shortcomings, but the hunt for scapegoats especially explained the complexity of our contemporary dilemmas. As discussed in Chapter Two, the connection between Christianity, Ancient Greek philosophy, and our contemporary environmental problems seems anything but self-evident. However, close readings of early modern books and letters undertaken by researchers like Harrisson (2005, 2006), Håkansson (2005), and Matthews (2008) show that the emergence of a new way of interpreting Scriptures (especially the Old Testament) as rather exact commands instead of earlier customs of reading them as symbolic language, has had an obvious effect on the way humans of the Western world have treated nature including each other and how they have used both humans and other creatures "in the name of God." We cannot blame the message of Christianity or any other religion for the course of the unsustainable route of human conduct. But an obvious scapegoat is to be found in the way many development enthusiasts have interpreted and used the words of any sacred writing as powerful tools for serving selfish and commercial interests.

I admit that I could have performed the first studies presented in Chapter Two more thoroughly and systematically, but I am not so sure that the outcome would have been much different. The major result of the first part of my study was that it showed the complexity of the environmental problems and the big challenge education has to face in meeting them. My first critical approach in Part One led me directly into the second strategy, and Part Two was a turn to the modern era. To get a satisfactory picture of how Rousseau thought about education in relation to nature, I had to employ more of his and others' writings than I had first intended. I did not know when I started that these topics were so central to his writings. Digging into lots

of different material, however, is in accordance with Foucault's research models. However, in utilizing so many sources, readers may blame me for superficiality. I agree that I might have gone into more depth on some points, but this would have deflected my chosen inquiry and might have bored some readers. The study of Rousseau's and Foucault's thoughts offered inspiring themes, useful methods, and apposite theories. Foucault's approach helped me to see things in a new light and to relate to the topic of my research diversely and creatively. If we return to the hourglass of modernity, with Rousseau allegorically as the waist, we can see postmodernity as a new, although not that remarkably different form of modernity. And in the postmodern critique, Foucault²⁶⁷ emerges, as Rousseau did in his time, as someone who is both a child of his age and a noisy and headstrong opponent who diverged from both the mainstream line and its critique, taking his own course at whatever cost. And, like Rousseau, Foucault leaned on history, participated in the transformation of his presence and himself by his words, and left those who remain the task of taking care of his brainchildren.

In Rousseau's thinking, ethics, nature, and education are strongly entwined, but despite his high-minded principles, he showed signs of being both a hedonist and an ascetic. He significantly participated in the shaping of the preconditions of modern society and in the constitution of modern humans. He was a loud voice both for and against; a child of his time on the topics of good and bad, and his example shows that it is impossible to step free from one's own context. Even protesting has to consider ethical conflicts from the perspective of both society members and as particular persons. Like the Mona-Lisa's smile that fascinates because nobody knows exactly why she is happy, Rousseau's texts attract and communicate because no one is fully convinced about what his intentions really were. In any case, the dialectical outlines and seeming paradoxes do not make the reading less inspiring. The main problem may not even be how he wrote, but how to read him. It is possible to distinguish Rousseau's writing technique as a particular way of writing philosophy and of considering and lecturing on education in a way that could transform the reader's thinking. It was dialectical rhetoric intended to trigger the reader's critical reflection. Maybe the issue of how to write about education is worthwhile considering today. Foucault was on the same track when he wrote about history. Both Rousseau and Foucault used literary expressions that could push the language to its limits, even

²⁶⁷ Foucault never called himself "postmodern;" others gave him this description.

beyond. Their language presented contradictions and reached spaces where the untouchable and abandoned reside. However, as an author Rousseau was present in most of his writings while Foucault sought to let the language speak for itself. Both presented themselves as unconventional, unwilling to be comfortably categorized, and neither of them answered to the name “philosopher.”

I have tried to not let their uniqueness stand in the way of a reasonable outcome, but these authors’ exceptionality has not made the work easier; conversely, it made it much more gratifying. While the point of departure was critical, self-reflexivity and self-criticism have been essential elements in the research process. It has offered many unexpected events and wonderful discoveries. Among the many surprises in this research was the connection Rousseau and Foucault shared through Stoic philosophy. Another interesting feature of this study is, without doubt, Rousseau’s many contradictions that, in turn, have exposed contradictions in my own way of relating to the world. Facing these contradictions has been a difficult but exciting challenge, but Foucault’s methods have led to this confrontation. A journey shared with these two thinkers has not at all been dull. While Foucault, like Rousseau, wanted to motivate his readers, he also wanted to prompt researchers to follow his advice, both in terms of how they saw themselves and how they viewed their research. However, while Rousseau regularly instructed others, Foucault rejected the philosopher’s role as a legislator who told others how or what to think. Foucault’s aim was to challenge others to self-transformation without giving any strict guidelines. It might look as though Rousseau might have been trying to make others change in particular ways; but if we read his texts as allegories, such a strong intention disappears. The limit between an authoring and a self-activating voice is thus never stable, and neither Foucault nor any other thinker manages to write with complete impartiality. Many have blamed Rousseau for not living according to the principles he articulated. Yet one can ask, is incongruity between acts and words a reason to stop listening to the speaker, or is the search for another’s shortcomings and imperfection only a way of hiding our own unwillingness to confront difficult choices? If we only listened to love songs written, played, and sung by people who are faithful lovers, there would not be many songs left to listen to. Rousseau’s ideas do not lose their significance because of his personal shortcomings.

My research has lived and changed shape due to the findings, and I gradually realized that my intuition to juxtapose two headstrong persons was a good choice. The combination of Rousseau and Foucault was inspiring and opened many doors.

But, I can now unveil that a third interesting person was involved in my initial plan: Mary Wollstonecraft. However, blending three such strong characters in the same book would have been a much too difficult undertaking. Nevertheless, I have not discarded her, but have saved her for a subsequent work. Moreover, it appears that considering her perspective will reveal new perspectives for education in relation to nature and sustainability. My study of Rousseau will also continue, and I am especially interested in *Julie, or the New Heloise*, which is deep enough for its own study. The same is the case for many other of Rousseau's books, as well, especially *Émile*. Therefore, I recommend that other educational researchers, especially those who still have not found their mission or want exposure to some new directions, take part in the endless project of discovering what Rousseau has to offer. I will also continue to re-read Foucault. His methods and theories stimulate new ideas again and again, and are useful in many research fields. And to repeat, both Rousseau and Foucault write very attractively, even if differently.

My reading of old books has not been a way of interpreting them anew, but of reading them in a new way and in relation to a new context; not with the intention of reaching the same horizon as the authors in question, but to rise above the horizon and daring to fly. I could have done many things otherwise. Firstly, I could of course have chosen a totally different way of studying the educational challenge of sustainability. Secondly, I could have studied Rousseau and Foucault in another way and searched for more divergence rather than agreement. Thirdly, I could have limited my study both vertically (with fewer dimensions) and horizontally (following a shorter time span). A more strict limitation could have found fewer and deeper conclusions, but my more expansive outline instead indicated various traces worth following. For that reason, this diverse work can be seen as groundwork that opens into a longer exploration that I will eagerly share with interested companions.

7.4 Final Conclusion

The main question in this book has been what ethical dimensions are relevant to the enigma of sustainability and what kind of education these dimensions require. I will end this book with a short answer to this complex question, building on my understanding of Rousseau's with the help of Foucault. A human's life has three basic dimensions: as an individual, as part of a society, and as a biological creature.

All three dimensions are interdependent because they are interlinked and they interact constantly. Humans are complicated beings and all of their life dimensions are interrelated, including all their social interactions. To live responsible and free lives, humans need to understand and manage their own individual desires and requirements, and to feel comfortable they also need an understanding of their mutual interactions (personal relations, but also politics, economics, art, etc.), and the interrelationship between humans and the natural world. It is difficult to manage life on earth in its contemporary status. Western education has basically concentrated on humans as objectively studying the world from the outside, either for knowing facts (empirical interest) or interpreting (hermeneutic interest), or for changing its conditions (critical interest). Nevertheless, they cannot learn to manage matters external to themselves if they do not first know themselves. A sustainable life on earth builds both on humans' accurate understanding of their role on this planet and on a willingness to act responsibly. Such an understanding is built through a process that involves themselves, other people, and the rest of the world—both humanly created cultural elements and the natural world.

What kind of practices of education do these dimensions call for? Education has previously built on knowledge about what it entails to be a human being as a distinct individual and as a social creature; thus, such knowledge relies on subjective, intersubjective, and objective aspects. Education has not, however, managed to provide humans with the competence demanded by life on earth. Instead, it has made them forget their earthly bonds and has promoted a belief that they are more than or above nature. The old Greek word *logos* has been interpreted narrowly as *word* or *rationality*, not in its initial meaning uttered by Heraclitus as a *logical order of the universe*. Human life on earth, the only natural habitat for earthly creatures, calls for awareness of this order through an education that emphasizes the human role as a biological species. The problem is how humans can learn to improve their common life without crossing the limit of what the natural world can tolerate. For a rational being, this limit requires ethical deliberation. Knowledge about the world exists on the human border where nature and society meet; education and ethics can try to overcome and break down this border. But this is no easy task since the border is built of prejudices and errors, and the creation of this dysfunctional border has taken thousands of years.

Since Rousseau's time, education has been included in the social attempt to control the inhabitants of a state. Education has thus been a part of a comprehensive social policy. However, education has not attempted to encourage critique and

management of the systems of which it is a part. If we consider the diverse fields of human practices as non-hierarchically interrelated, as Benner suggest, in plain words this means that education cannot only deliver theoretical knowledge about the world; its task is also to promote practical knowledge about how such theoretical knowledge relates to one's own life and to various sectors of society. The role of education is then also to train practical reason to consider the ethical conditions for mutual human undertakings and to identify the limits and terms nature sets for human life, limits which may contradict the Enlightenment dream of steady progress. Viewed this way, education has to offer both theoretical knowledge and provide possibilities for ethical deliberation, thus 'provoking' students to form personal judgments that will lead to responsible actions based on their own reflective choices.

In *Reveries* Rousseau claims that happiness on earth is never permanent, but fleeting and fluctuating. We do not know the future, we can only hope that life goes on and try to prevent possible catastrophes. But it might be unwise to let striving for the possibilities of a good life in the future overshadow attending to present conditions and issues. Shaping visions for change can be crucial, but it would be unwise to concentrate on equality, justice, and vitality for life on earth entirely in an unsure future by ignoring pressing problems in the present. Today's poor and indecently treated do not benefit from others' visions of a better future. Their desires are of other kinds than the desires of the rich. Climate change and the increase of endangered species and biotopes will not abate and wait for prolonged negotiation. Neither sustainability nor development might be the right credo. Humans and the earth are changing, so sustainability is difficult and development can have many faces. Both need to be subjected to critical discourse, not only in political and business contexts, but also in education.

The modern project had a strong faith in knowledge and enlightenment that could lead to a better world. Still, the question remains: For whom was this project undertaken? The answer is: At least not for the whole of humanity and not for all life forms. The advanced, rational originators and facilitators of this grand project had an expansive dream of improving all of humanity. However, now we stand at the beginning of a new millennium with a shame that is impossible to shed because most of us Westerners, but many others as well, participate in the same race for uncontrolled development. And the negative consequences of this inglorious race are on show yearly in Worldwatch Institute's report, *State of the World*—definitely not entertaining but still worth reading. Why is it that an enlightened world spends so

much money on military expenses and at the same time so many people lack food and clean drinking water? Why do a few hundred people own half of the world's capital? Why are so many luxury goods produced at the risk of polluting nature? For example, China produces a super-abundance of low-priced commodities consumed around the world because of cheap labor and less restrictive environmental laws. But who buys them and how do they dispose of them?

The existence of the gap between environmental knowledge and action can not be blamed just on failures of environmental education or only on formal education. Education is both lifelong and lifewide, is involved in all human undertakings, and takes place nearly everywhere. Therefore, a total control over the long-term outcome of a group's (or even an individual's) education concerning values and value-related conduct is unattainable. Believing that the present practices of environmental education can do all the work needed to save the world does not offer much hope for the future. Its status has mostly been like a watchdog that sleeps in the garden and never is let in the house permanently as a proper family member. While understanding nature and humanity's role as part of it is crucial for human life, learning to live cooperatively in accordance with the life-protecting systems of the earth is the most pressing issue for education. It cannot be treated as some kind of add-on or complement to 'basic' education but has to be built upon the foundation of all education. This means that environmental education does not exist on its own term, as a stand-alone topic. And it cannot be temporally limited. While nature is life itself, of which humans are a part, the relationship of humans to nature is the most important cornerstones in all of education. Why do we not use the knowledge we have? Benner (2005) repeats Friedrich Schleiermacher's very relevant question about what this generation wants of the next generation. Uljens' (1998) answer to this question is that a non-affirmative theory has no reply because the task of education is not readymade answers but, instead, the developing of theories in which questioning comes before answers. However, while educators should avoid feeding readymade answers to the younger generation, they still need to act as good role models. The question that can be asked of educators and other adults, then, is: Do we want to continue our destructive lives or are we willing to become better models for the young? Why should they do things differently than we do?

As stressed in the beginning of this book, humans are earthly creatures. 'From dust to dust' is inescapable. Rousseau wanted to educate humans to become more "natural" and he saw a closer connection to the natural world as crucial to that

progress. Humans are neither totally nor partly machines, not numbers, not capital, and not products—but they can easily start to believe that they are. Humans are animals that unfortunately do not always base their actions on all their capacities. I agree with Orr who states: “It makes far better sense to reshape ourselves to fit a finite planet than to attempt to reshape the planet to fit our infinite wants” (Orr, 2004, p. 9). Thus, we return to the quest for self-training, to the “care of the self.” The threefold simple answer to my twofold main question can be given in one sentence: An education that wants to challenge sustainability builds on reinventions of basic educational theories and attends to humans’ self-relation, humans’ mutual relations, and humans’ relation to other parts of nature.

Even if I may have sounded normative in this description of my final conclusions, my aim has been to be provocative rather than dogmatic. I hope the thoughts presented in this book will awaken new perspectives among readers who are filled with the energy and will to make this planet a better one. However, this is no quick assignment. I think we have to give up many myths and dreams that distract us. It is a delusion to dream that, even if this generation has not managed to save the world, we are nonetheless capable of teaching the next generations to be wiser and to live in a more gentle ways. If we cannot motivate ourselves to change, we can hardly influence others to change. Maybe sustainability needs to become a state of mind, an ethos, where the care for future life not is allowed to forgo the care of presently living beings and their right to a decent life. After all, I do not believe in excessively unrealistic dreams, especially not costly ones. There is no evidence that the model of a bad teacher teaches someone to become good, and it seems all too obvious that most adults are bad models. We give mixed signals, since we regard poverty as a greater shame than our failure to take responsibility for the poor and other defenseless creatures of the world. A luxurious life is honored, even when it is attained at the expense of the common good. And to return to the beginning of Chapter One, the moon may seem like a new El Dorado—a Paradise where humans can escape from the daily problems and be infinitely enlightened. However, no matter how much money we invest in a tomb in outer space, we cannot escape the death of our human substance, our human nature. The great question, then, is whether we can escape the loss of humankind on the earth, or if we need a new planet on which to restart human life. Nevertheless, we probably can not escape the loss of humankind if we do not change human conduct. However, is this possible without changing human nature? According to Foucault (1970), history may have confronted humankind with a truth

that causes us to stop and face ourselves. Moreover, then we may have to reveal once and for all the veil Rousseau talked about; but I will let Foucault have the last word:

The more man makes himself at home in the heart of the world, the further he advances in his possession of nature, the more strongly also does he feel the pressure of his finitude, and the closer he comes to his own death. History does not allow man to escape from his initial limitations – except in appearance, and if we take the word limitation in its superficial sense; but if we consider the fundamental finitude of man, we perceive that his anthropological situation never ceases its progressive dramatization of his History, never ceases to render it more perilous, and to bring it closer, as it were, to its own impossibility. (Foucault, 1970, p. 259)

Bibliography

Main English Rousseau Sources

Works in this study by Jean-Jacques Rousseau in alphabetic order according to the abbreviations followed by the primarily used English versions and the abbreviations used for them.

Botanical Writings, BW

Lettres sur la botanique, Fragments pour un dictionnaire des termes d'usage en botanique, etc. 1765-1773.

Botanical writings (A. Cock, Trans.) In: C. Kelly (Ed.), *Collected writings of Rousseau: Vol. 8. The reveries of the solitary walker, botanical writings, and letter to Franquières* (pp. 91-255). Hanover, NH: University Press of New England, 2000.

Confessions, C

Les Confessions, part I, 1781, part II, 1789.

The confessions of Jean-Jacques Rousseau (C. Kelly, Trans.) In C. Kelly, R. D. Masters & P. G. Stillman (Eds.), *The collected writings of Rousseau: Vol. 5. The confessions and correspondence, including the letters to Malesherbes 1758* (pp. 1-550). Hanover, NH: University Press of New England, 1995.

Corsica, PCC

Projet de constitution pour la Corse, 1765

Plan for a constitution for Corsica (C. Kelly, Trans.). In C. Kelly & A. Bloom (Eds.), *The collected writings of Rousseau: Vol. 2. The plan for perpetual peace, on the government of Poland, and other writings on history and politics* (pp. 123-155). Hanover, NH: Dartmouth College Press, 2005.

Dialogues, RJJ

Rousseau juge de Jean-Jacques. Dialogues, 1782.

Rousseau, Judge on Jean-Jacques: Dialogues (J. R. Bush, C. Kelly & R. D. Masters, Trans.). In: R. D. Masters & C. Kelly (Eds.), *The collected writings of Rousseau: Vol. 1. Judge on Jean-Jacques: Dialogues*. Hanover, NH: Dartmouth College Press, 1990.

Émile, E

Émile ou de l'éducation, 1762.

Emile or on education (A. Bloom, Trans.). New York: Basic Books, 1979. [The 4th book in *Emile* continues the section *Profession de foi du vicaire savoyard*. 'Professions of faith of the Savoyard vicar', referred to separately as *Savoyard vicar*.]

Émile or on education (B. Foxley, Trans.). NuVision Publications, LLC, 2007. Referred to as Rousseau, 2007.

Émile et Sophie, E&S

Émile et Sophie ou les solitaires, 1765-

Emile and Sophie; or, the solitaires (C. Kelly, Trans.). In C. Kelly (Ed.), *Collected writings of Rousseau: Vol. 8. Émile or on Education* (pp. 685-721). Hanover, NH: Dartmouth College Press, 2009.

1st Discourse, 1stD

Discours sur les sciences et les arts, 1751.

Discourse on the sciences and arts or first discourse. In V. Gourevitch (Ed. & Trans.), *The discourses and other writings* (pp. 1-28). Cambridge, GBR: Cambridge University Press, 1997.

Idea of the Method, IM

Idée de la méthode dans la composition d'un livre.

Idea of the method in the composition of a book. In V. Gourevitch (Ed. & Trans.), *The discourses and other writings* (pp. 300-304). Cambridge, GBR: Cambridge University Press, 1997.

Julie, JNH

Julie, ou la nouvelle Héloïse, 1761.

Julie, or the new Heloise: Letters of two lovers who live in a small town at the foot of the alps (P. Stewart & J. Vaché, Trans.). In R. D. Masters & C. Kelly (Eds.), *The collected writings of Rousseau: Vol. 6*. London: Dartmouth College, 1997

Language, EOL

Essai sur l'origine des langues, 1755.

Essay on the origin of languages. In (V. Gourevitch, Ed. & Trans.), *The discourses and other writings* (pp. 247-299). Cambridge, GBR: Cambridge University Press, 1997.

Letter to Franquières, LF

Lettre à Franquières, 1769.

Letter to Franquière (T. E. Marshall, Trans.). In C. Kelly (Ed.), *Collected wrings of Rousseau: Vol. 8. The reveries of the solitary walker, botanical writings, and letter to Franquières* (pp 257-270). Hanover, NH: University Press of New England, 2000.

Letter to Voltaire, LV

Lettre à Voltaire, 1756

Letter to Voltaire. In V. Gourevitch (Ed. and Trans.), *The discourses and other writings* (pp. 232-246). Cambridge: Cambridge University Press, 1997.

Malesherbes, LM

Lettres à Malesherbes, part I, 1781, part II, 1789

Letters to Malesherbes (C. Kelly, Trans.). In C. Kelly, R. D. Masters & P. G. Stillman (Eds.), *The collected writings of Rousseau: Vol. 5. The confessions and correspondence, including the letters to Malesherbes 1758* (pp. 572-583). Hanover, NH: University Press of New England, 1995.

Poland, GP

Considérations sur le gouvernement de Pologne, 1772.

Considerations on the government of Poland and on its planned reformation (C. Kelly, Trans.). In C. Kelly (Ed.), *The collected writings of Rousseau: Vol. 2. The plan for perpetual peace, on the government of Poland, and other writings on history and politics* (pp. 167-240). Hanover, NH: Dartmouth College Press, 2005.

Political Economy, DPE

Discours sur l'économie politique, 1755 (in the Encyclopedia).

A discourse on political economy (G. D. H. Cole, Trans.). In J-J Rousseau, *The social contract, A discourse on the origin of inequality, A discourse on political economy* (pp. 123-145). Stilwell, KS: Digireads.com Publishing. 2005.

Reveries, RSW

Les rêveries du promeneur solitaire, 1782.

The reveries of the solitary walker (C. E. Butterworth, Trans.). In C. Kelly (Ed.), *Collected writings of Rousseau: Vol. 8. The reveries of the solitary walker, botanical writings, and letter to Franquières* (pp. 1-90). Hanover, NH: University Press of New England, 2000.

Saint-Pierre, ASP

Écrits sur l'Abbé de Saint-Pierre, 1756

On the writings of Abbé de Saint-Pierre (J. Bush & J. Kelly, Trans.). In C. Kelly (Ed.), *The collected writings of Rousseau: Vol. 2. The plan for perpetual peace, on the government of Poland, and other writings on history and politics* (pp 23-120). Hanover, NH: Dartmouth College Press, 2005.

2nd Discourse, 2nd D

Discours sur l'origine et les fondements de l'inégalité parmi les hommes, 1755.

Discourse on the origin and foundations of inequality among men or second discourse. In V. Gourevitch, Ed. & Trans.), *The discourses and other writings* (pp. 111-222). Cambridge, XX: Cambridge University Press, 1997.

Social Contract, SC

Du contrat social, 1762.

The social contract. In J-J Rousseau, *The social contract, A discourse on the origin of inequality, a discourse on political economy* (G. D. H. Cole, Trans., pp. 3-72). Stilwell, KS: Digireads.com Publishing, 2005.

Universal Chronology, UC

L'histoire universal.

Universal chronology or general history of times from creation of the world up to the present (C. Kelly, Trans.). In C. Kelly (Ed.), *The collected writings of Rousseau: Vol. 2. The plan for perpetual peace, on the government of Poland, and other writings on history and politics* (pp. 1-5). Hanover, NH: Dartmouth College Press, 2005.

Main French Rousseau Sources

Raymond, M & Gagnebin, B. (Eds.). *Ouvres complètes de Jean-Jacques Rousseau: Vol. 1. Les confessions. Autres textes autobiographiques*. Paris: Gallimard, Bibliothèque de la Pléiade, 1959. (Referred to as *OV I*).

Raymond, M & Gagnebin, B. (Eds.). *Ouvres complètes de Jean-Jacques Rousseau: Vol. 2. La nouvelle Héloïse. Théâtre – poésies. Essais littéraires*. Paris: Gallimard, Bibliothèque de la Pléiade, 1961. (Referred to as *OV II*).

Raymond, M & Gagnebin, B. (Eds.). *Ouvres complètes de Jean-Jacques Rousseau: Vol. 3. Du contrat social. Écrits politiques*, 1964. Paris: Gallimard, Bibliothèque de la Pléiade. (Referred to as *OV III*).

Raymond, M & Gagnebin, B. (Eds.). *Ouvres complètes de Jean-Jacques Rousseau: Vol. 4. Émile. Education – morale – botanique*. Paris: Gallimard, Bibliothèque de la Pléiade, 1969. (Referred to as *OV IV*).

Other References

A universal environmental ethics: The ultimate goal of environmental education. (1991). *Connect*, 16(2), 1-5.

Adams, W. M. (2001). *Green development: Environment and sustainability in the third world* (2nd ed.). London: Routledge.

Adorno, T. W. (1987). Kulturkritik och samhälle [Cultural critique and society]. In J. Burill & T. W. Adorno (Eds.), *Kritisk teori: En introduktion* (J. Retzlaff, Trans., pp. 317-336). Göteborg, Sweden: Daidalos. (Original work published 1955)

Affeldt, S. G. (2006). The force of freedom: Rousseau on forcing to be free. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 3. Principles and institutions* (pp. 399-432). London: Routledge. (Reprinted from *Political Theory*, 27(3), 1999, 299-333)

- Ambjörnsson, R. (1977). Rousseau och den naturliga människan [Rousseau and the natural human]. In J.-J. Rousseau, *Émile eller om uppfostran, Part I* (C. A. Fahlstedt, Trans., pp. iii-xxxiii). Göteborg, Sweden: Stegelsands.
- Anscombe, G. E. M. (1958). Modern moral philosophy [Electronic version]. *Philosophy*, 33(124), 1-19.
- Aristotle. (1962). *Politics. Books III and IV* (R. Robinson, Trans.). New York: Oxford University Press.
- Aristotle. (1980). *The Nicomachean ethics* (H. G. Apostle, Trans.). Dordrecht, Netherlands: D. Reidel.
- Aristotle. (1994-2009a). *On the parts of animals* (W. Ogle, Trans.). The Internet Classics Archive. Retrieved October 12, 2010 from http://classics.mit.edu/Aristotle/parts_animals.html
- Aristotle. (1994-2009b). *On the soul* (J. A. Smith, Trans.). The Internet Classics Archive. Retrieved October 12, 2010 from <http://classics.mit.edu/Aristotle/soul.html>
- Aristotle. (1994-2009c). *The history of animals* (D'A. W. Thompson, Trans.). The Internet Classics Archive. Retrieved October 12, 2010 from http://classics.mit.edu/Aristotle/history_anim.html
- Attfield, R. (1994). *Environmental philosophy: Principles and prospects*. Aldershot, GBR: Avebury.
- Attfield, R. (2003). *Environmental ethics*. Cambridge, GBR: Polity Press.
- Augustinus (1954). *Bekännelser* [Confessions] (S. Lidman, Trans.). Helsingfors, Finland: Söderströms. (Original work published about 397-398 AD.)
- Bacon, F. (1900a). *Advancement of learning*. In F. Bacon, *Advancement of learning and novum organum* (pp. 1-307). New York: The Colonial Press. (Original work published 1605)
- Bacon, F. (1900b). *Novum organum*. In F. Bacon, *Advancement of learning and novum organum* (pp. 311-470). New York: The Colonial Press. (Original work published 1620)
- Bacon, F. (2004a). The instauratio magna preliminaries. In *The instauratio magna part II: Novum organum and associated texts* (pp. 2-25). New York: Oxford University Press. (Original work published 1620)
- Bacon, F. (2004b). *The new Atlantis*. Whitefish, MT: Kessinger Publishing. (Original work published 1627)
- Ballantyne, R. & Packer, J. (2009). Introducing a fifth pedagogy: Experience-based strategies for facilitating learning in natural environments. *Environmental Education Research*, 15(2), 243-262.
- Ban, Ki-moon. (2009). Foreword. In United Nations, *The millennium development goals report 2009* (p. 3). New York: United Nations.
- Bardy, M. (1996). *Lapsuus ja aikuisuus: Kohtauspaikkana Émile* [Childhood and adulthood: Meeting point Émile]. Helsinki, Finland: Stakes.
- Barrera-Ossorio, A. (2006). *Experiencing nature: The Spanish American Empire and the early scientific revolution*. Austin, TX: University of Texas Press.
- Bauer, W. (1997). Education, Bildung and post-traditional modernity. *Curriculum Studies*, 5(2), 163-175.
- Bauer, W. (2003). On the relevance of *Bildung* for democracy. *Educational Philosophy and Theory*, 35(2), 210-225.
- Bauman, Z. (2000). *Liquid Modernity*. Cambridge, GBR: Polity Press.
- Bauman, Z. (2007). *Consuming life*. Cambridge, GBR: Polity Press.
- Bawden, R. (2004). Sustainability as emergence: The need for engaged discourse. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 21-31). Dordrecht, Netherlands: Higher Academic.
- Beck, U. (1992). *Risk society: Towards a new modernity* (M. Ritter, Trans.). London: Sage.
- Beck, U. (2006). *The Cosmopolitan vision* (C. Cronin, Trans.). Cambridge, GBR: Polity Press.
- Bellah, R. N. (2002). Rousseau on society and the individual. In S. Dunn (Ed.), *Social contract and the first and second discourses* (pp. 266-288). New Haven, CT: Yale University Press.

- Belshaw, C. (2001). *Environmental philosophy: Reason, nature and human concern*. Chesham, GBR: Acumen.
- Bendixon, S. (1929). *Rousseau: En teckning av hans liv och verk* [Rousseau: A picture of his life and work]. Stockholm, Sweden: Bonniers.
- Benner, D. (2001). *Allgemeine Pädagogik: Eine systematisch-problemgeschichtliche Einführung in die Grundstruktur pädagogischen Denkens und Handelns* [General education: A systematic problem-historical introduction to the fundamental principles of educational thinking and acting]. München, Germany: Juventa Verlag.
- Benner, D. (2005). *Tekster til dannelses-filosofi: Mellem etik, pædagogik og politik* [Texts on educational philosophy: Between ethics, education and politics] (A. von Oettingen, Ed., Christensen, B. Trans.). Århus, Denmark: Klim.
- Bernstein, J. (1990). Difficult difference: Rousseau's fiction of identity. In P. Hulme & L. Jordanova (Eds.), *The Enlightenment and its shadows* (pp. 66-83). London: Routledge.
- Best, S. & Kellner, D. (1991). *Postmodern theory: Critical interrogations*. New York: The Guildford Press.
- Biesta, G. (2006). What is the point of lifelong learning if lifelong learning has no point? On the democratic deficit of policies for lifelong learning. *European Educational Research Journal*, 5(3-4), 169-180.
- Björk, G. (2000). *Pedagogik i exil: En bildningsfilosofisk studie med existentiellt fokus* [Pedagogy in exile: A Bildung philosophical study with existential focus]. Åbo, Finland: Åbo Akademi University Press.
- Bloom, A. (2006). The education of democratic man: Émile. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 88-109). London: Routledge. (Reprinted from *Daedalus* 107, 1978, 135-153)
- Bloom, A. (1997). Introduction. In J.J. Rousseau, *Emile or on education* (A. Bloom, Trans., pp. 3-29). New York: Basic Books.
- Bloom, B. S. (1957). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: David McKay.
- Bonnett, M. (2002). Sustainability as a frame of mind: And how to develop it. *The Trumpeter*, 18(1), 1-9. Retrived October 5, 2010 from <http://trumpeter.athabascau.ca/index.php/trumpet/article/view/115/120>
- Bonnett, M. (2006) Education for sustainability as a frame of mind. *Environmental Education Research*, 12(3-4), 265-276.
- Bonnett, M. (2007). Environmental education and the issue of nature. *Journal of Curriculum Studies*, 39(6), 707-721.
- Bonnett, M. (2009). Systemic wisdom, the 'selving' of nature, and knowledge transformation: Education for the 'Greater Whole'. *Studies in Philosophy & Education*, 28(1), 39-49.
- Bowen, J. (1981). A history of Western education: Vol. 3. The modern West Europe and the new world. New York: St. Martin's Press.
- Breiting, S. (2009). Issues for environmental education and ESD research development: Looking ahead from WEEC 2007 in Durban. *Environmental Education Research*, 15(2), 199-207.
- Brendel, E. (2004). Intuition pumps and the proper use of thought experiments. *Dialectica*, 58(1), 89-108.
- Broberg, G. (1978). "Och Gud såg och det var godt". Moses, Linné och Darwin om skapelsen ["God saw and it was good," Moses, Linnaeus and Darwin on the Creation]. In von Linné, C. *Om jämvikten i naturen* (A. Piltz, Trans, pp. 4-48). Stockholm, Sweden: Carmina.
- Broome, J. H. (1963). *Rousseau: A study of his thoughts*. London: Edward Arnold.
- Brown, R. J. (2004, December). Peeking into Plato's heaven. *Philosophy of Science*, Vol. 71, 1126-1138.
- Butin, D. W. (2006). Putting Foucault to work in educational research. *Journal of Philosophy of Education*, 40(3), 371-380.

- Börjesson, M. (2003). *Diskurser och konstruktioner: En sorts metodbok* [Discourses and constructions: A kind of a method book]. Lund, Sweden: Studentlitteratur.
- Caduto, M. J. (1998). Ecological education: A system rooted in diversity. *Journal of Environmental Education*, 29(2), 11-16.
- Cantell, H. (2003). *Tarjolla kestävä kehitystä: Mutta miksi ei ympäristökasvatusta?* [Sustainable development available: But why not environmental education?]. In A. Virta & O. Marttila (Eds.), *Opettaja, asiantuntijuus ja yhteiskunta. Ainedidaktiikan symposium 7.2.2003* (pp. 36-43). Turku, Finland: Turun yliopisto, Kavastustieteiden tiedekunnan julkaisuja B72.
- Cantell, H. & Larna, R. (2006). *Ympäristövatullisuus nuorten sanoissa ja teoissa* [Environmental responsibility in young people's words and deeds]. Helsinki, Finland: Helsingin kaupunki, Opetusvirasto.
- Cantell, H. & Koskinen, S. (2004). Ympäristökasvatuksen tavoitteita ja sisältöjä [The aims and content of environmental education]. In H. Cantell (Ed.), *Ympäristökasvatuksen käsikirja* (pp. 60-79). Jyväskylä, Finland: PS-Kustannus.
- Caring for the earth: A Strategy for sustainable living*. (1991). Gland, Switzerland: IUCN/UNEP/WWF.
- Carone, G. R. (2001). The classical Greek tradition. In D. Jamieson (Ed.), *A companion to environmental philosophy* (pp. 67-80). Oxford, GBR: Blackwell.
- Carr, D. (2000). *Professionalism & ethics in teaching*. Florence, KY: Routledge.
- Carr, D. (2004). *Making sense of education: An introduction to the philosophy and theory of education and teaching* (2nd print). New York: Routledge.
- Carr, W. (2003). Educational research and its histories. In P. Sikes, J. Nixon & W. Carr (Eds.), *The moral foundations of educational research: Knowledge, inquiry and values* (pp. 6-17). Philadelphia, PA: Open University Press.
- Carr, W. & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. London: Falmer.
- Castel, R. (1994). "Problematization" as a mode of reading history (P. Wissing, Trans.). In J. Goldstein (Ed.), *Foucault and the writing of history* (pp. 237-252). Oxford, GBR: Blackwell.
- Catholic Encyclopedia*. (2010). Retrieved December 2, 2010, from <http://www.newadvent.org/cathen/12688b.htm>
- Chappell, T. D. J. (1997). Introduction. In T. D. J. Chapell (Ed.), *The philosophy of the environment* (pp. 1-8). Edinburgh, GBR: Edinburgh University Press.
- Chawla, L. (1999). Life paths into effective environmental action. *Journal of Environmental Education*, 31(1), 15-26.
- Clark, S. R. L. (1997). Platonism and the gods of place. In T. D. J. Chapell (Ed.), *The philosophy of the environment* (pp. 19-37). Edinburgh, GBR: Edinburgh University Press.
- Cohn, R. L. (1998). Mortality in transport. In S. Drescher & S. L. Engerman (Eds.), *A historical guide to slavery* (pp. 290-292). New York: Oxford University Press.
- Comenius, J. A. (1989). *Didactica Magna: Stora undervisningsläran* (T. Kroksmark, Trans.). Göteborg, Sweden: Daidalos. (Original work published 1628-1632)
- Compayré, G. J.-J. (1953). *Rousseau ja hänen kasvatusaatteensa* (J. A. Hollo, Trans.) [Rousseau and his ideas on education]. Helsinki, Finland: WSOY.
- Conway, A. (2003). Ur principerna i den äldsta och modernaste filosofin [From the principles of the oldest and most modern philosophy]. In A.-K. Malmström-Ehrling, *Kvinnliga filosofer från medeltid till upplysning: Originaltexter i urval* (2nd ed., pp. 134-156). Stockholm, Sweden: Natur och Kultur. (Original work published 1690)
- Conversi, D. (2000). Cosmopolitanism and nationalism. In A. Leoussi (Ed.), *Encyclopaedia of nationalism* (pp. 35-39). New Brunswick, NJ: Transaction Publishers.
- Cooper, L. D. (2006). Between Eros and will to power: Rousseau and "the desire to extend our being". In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political*

- philosophers: Vol. 2. Human nature and history* (pp. 443-475). London: Routledge. (Reprinted from *American Political Science Review*, 98(1), 2004, 105-119)
- Cottingham, J. (1993). *A Descartes dictionary*. Oxford, GBR: Blackwell.
- Courtney-Hall, P & Rogers, L. (2002). Gaps in mind: Problems in environmental knowledge-behaviour modelling research. *Environmental Education Research*, 8(3), 283-297.
- Couzens Hoy, D. (1986). Introduction. In D. Couzens Hoy (Ed.), *Foucault: A critical reader* (pp. 1-25). Oxford, GBR: Basil Blackwell.
- Cranston, M. (1983). *Jean-Jacques: The early life and work of Jean-Jacques Rousseau, 1712-1754*. London: Allen Lane.
- Cro, S. (1990). *Noble Savage: Allegory of Freedom*. Waterloo, Canada: Wilfrid Laurier University Press.
- Cutting, R. & Cook, R. (2009). The World Environmental Education Congress 2007: A critical appraisal. *Environmental Education Research*, 15(2), 177-187.
- Dahl, E.-L. (1992). Rousseaus kulturkritik [Rousseau's critique of culture] In J.-J. Rousseau *Kulturen och människan: Två avhandlingar* (pp. 7-26). Göteborg, Sweden: Daidalos.
- Dalton, T. C. (2001). *Becoming John Dewey: Dilemmas of a philosopher & naturalist*. Bloomington, IN: Indiana University Press.
- Davidson, A. I. (1986). Archeology, genealogy, ethics. In D. Couzens Hoy (Ed.), *Foucault: A critical reader* (pp. 221-233). Oxford, GBR: Basil Blackwell.
- Davies, O. & de Blécourt, W. (Eds). (2004). *Beyond the witch trials: Witchcraft and magic in Enlightenment Europe*. Manchester, GBR: Manchester University Press.
- Davion, V. (2001). Ecofeminism. In D. Jamieson (Ed.), *A companion to environmental philosophy* (pp. 233-247). Oxford, GBR: Blackwell.
- Deely, J. (2001). *Four ages of understanding: The first postmodern survey of philosophy from ancient times to the turn of the twenty-first century*. Toronto, Canada: University of Toronto Press.
- Delaney, J. (2006). *Rousseau and the ethics of virtue*. New York: Continuum International.
- DeGarmo, C. (2006). Social aspects of moral education. In J. W. Null & D. Ravitch (Eds.), *Forgotten heroes of American education: The great tradition of teaching* (pp. 273-294). Greenwich, CT: Information Age Publishing. (Original work published 1907)
- De Mey, T. & Weber, E. (2003). Explanation and thought experiments in history. *History and Theory*, 42(1), 28-38.
- Dent, N. J. H. (1988). *Rousseau*. Oxford, GBR: Basil Blackwell.
- Dent, N. J. H. (1992). *A Rousseau dictionary*. Oxford, GBR: Blackwell Publishers.
- Descartes, R. (1993a). Avhandlingen om metoden [Discourse on the method]. In R. Descartes, *Valda skrifter* (K. Marc-Wogau, Trans, pp. 27-79). Stockholm, Sweden: Natur och Kultur. (Original work published 1637)
- Descartes, R. (1993b). Avhandlingen om själens passioner [The passions of the soul]. In R. Descartes, *Valda skrifter* (K. Marc-Wogau, Trans., pp. 147-262). Stockholm, Sweden: Natur och Kultur. (Original work published 1649)
- Descartes, R. (1998a). Description of the human body. In R. Descartes, *The world and other writings*. (S. Gaukroger, Ed. & Trans., pp. 170-205). Cambridge, GBR: Cambridge University Press. (Original work published 1640)
- Descartes, R. (1998b). The treatise on light. In R. Descartes, *The world and other writings* (S. Gaukroger, Trans., pp. 3-75). Cambridge, GBR: Cambridge University Press. (Original work published 1664)
- Descartes, R. (1998c). The treatise on man. In R. Descartes, *The world and other writings* (S. Gaukroger, Trans., pp. 99-169). Cambridge, GBR: Cambridge University Press. (Original work published 1666)
- Dewey, J. (2006). *Democracy and education* [Electronic version]. Raleigh, NC: Hayes Barton Press. (Original work published 1916)

- Dewey, J. (1929). *The quest for certainty: A study of the relation of knowledge and action*. New York: Minton, Balch & Company.
- Diamond, J. (1997). *Guns, germs and steel: The fates of human societies*. New York: W. W. Norton.
- Diderot, D. (1956). *Rameau's nephew and other works*. Indianapolis, IN: Hacklett Publishing company. (Original work published 1772)
- Dietz, T. & Stern, P. C. (2002). Exploring new tools for environmental protection. In T. Dietz & P. C. Stern (Eds.), *New tools for environmental protection: Education, information and voluntary measures* (pp. 3-16). Washington, DC: National Academic Press.
- Dillon, J. (2003). On learners and learning in environmental education: Missing theories, ignored communities. *Environmental Education Research*, 9(2), 215-226.
- Dorn, J. A. (2007). Sustainable development: A market-liberal vision. *Electronic Journal of sustainable development*, 1(1). Retrieved October 12, 2010, from http://www.ejsd.org/public/journal_article/5
- Doberty, R. (2007). Critically framing education policy: Foucault, discourse and governmentality. In M. A. Peters & T. Besley (Eds.), *Why Foucault? New directions in educational research* (pp. 193-204). New York: Peter Lang.
- Drouin, J-M. (1989). From Linnaeus to Darwin: Naturalists and travelers. In M. Serres (Ed.), *A history of scientific thoughts: Elements of a history of science* (2nd ed., pp. 401-421). Oxford, GBR: Blackwell.
- Eby, F. (1952). *The development of modern education: In theory, organization and practice*. New York: Prentice-Hall.
- Edelman, G. (2004). *Enlightenment and the intellectual foundations of modern culture*. New Haven, CT: Yale University Press.
- Edwards, A. S. (2005). *Sustainable revolution: Portrait of a paradigm shift*. Gabriola Islands, BC: New Society.
- Edwards, R. & Usher, R. (2001). Lifelong learning: A postmodern condition of education. *Adult Education Quarterly*, 51(4), 273-287.
- Ellingson, T. (2001). *The myth of the noble savage*. London: University of California Press.
- Elmhirst, R. & Resurreccion, B. P. (2008). Gender and Natural Resource Management: New dimensions, new debates. In R. Elmhirst & B. P. Resurreccion, *Gender and natural resource management: Livelihoods, mobility and interventions* (pp. 3-20). London: Earthscan.
- Elvin, M. (2004). *Retreat of the elephants: An environmental history of China*. New Haven, CT: Yale University Press.
- Eriksson, G. & Frängsmyr, T. (2004). *Idéhistoriens huvudlinjer* [The main lines of history of ideas] (4th. ed.). Stockholm, Sweden: Wahlström & Widstrand.
- Faccarello, G. & Steiner, P. (2008). Interest, sensation and the science of the legislator: French 'philosophie économique', 1695-1830. *The European Journal of the History of Economic Thought*, 15(1), 1-23.
- Fallace, T. D. (2008). John Dewey and the savage mind: Uniting anthropological, psychological, and pedagogical thought, 1894–1902. *Journal of the History of the Behavioral Sciences*, 44(4), 335-349.
- Faubion, J. D. (1998). Introduction. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (pp. xiii-xliii). New York: The New Press.
- Ferreira, J-A. (2009). Unsettling orthodoxies: Education for the environment/for sustainability. *Environmental Education Research*, 15(5), 607-620.
- Fien, J. & Tilbury, D. (2002). The challenge of sustainability. In D. Tilbury, R.B. Stevenson, J. Fien & D. Schreuder, *Education and sustainability: Responding to the global challenge* (pp. 1-12). Gland, Switzerland: IUCN.

- Fish, R. (2008). *Sustainable Farmland Management: Transdisciplinary Approaches*. Cambridge, MA: CABI Publishing.
- Foucault, M. (1967). *Of other spaces, heterotopias* (J. Miscoewiec, Trans.). Retrived October 10, 2010 from <http://foucault.info/documents/heteroTopia/foucault.heteroTopia.en.html>
- Foucault, M. (1970). *The order of things: An archeology of human sciences* (Trans. anonymous). New York: Wintage Books.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). New York: Vintage Books.
- Foucault, M. (1978). *The history of sexuality: Vol 1, An introduction* (R. Hurley et al., Trans.). New York: Random House.
- Foucault, M. (1980a). Prison talk. In M. Foucault, *Power/knowledge: Selected interviews and other writings 1972-1977* (C. Gorden, Ed., C. Gordon, L. Marshall, J. Mephram & K. Soper, Trans., pp. 37-54). New York: The Harvester Press.
- Foucault, M. (1980b). Truth and power. In M. Foucault, *Power/knowledge: Selected interviews and other writings 1972-1977* (C. Gorden, Ed., C. Gordon, L. Marshall, J. Mephram & K. Soper, Trans., pp. 109-133). New York: The Harvester Press.
- Foucault, M. (1980c). Two lectures. In M. Foucault, *Power/knowledge: Selected interviews and other writings 1972-1977* (C. Gorden, Ed., C. Gordon, L. Marshall, J. Mephram & K. Soper, Trans., pp. 78-108). New York: The Harvester Press.
- Foucault, M. (1984). Space, knowledge, and power (C. Hubert, Trans.). In P. Rabinow (Ed.), *The Foucault reader* (pp. 239-256). New York: The Pantheon Books.
- Foucault, M. (1985). *The use of pleasure: Vol 2. The history of sexuality* (R. Hurley et al., Trans.). New York: Random House (Vintage Books ed. 1990).
- Foucault, M. (1986a). Makt och upplysning [Power and enlightenment] (M. Löfgren, Trans.). In M. Löfgren & A. Molander (Eds.), *Postmoderna tider* (pp. 173-186). Stockholm, Sweden: Norstedts.
- Foucault, M. (1986b). *The care of the self: Vol 3. History of sexuality* (R. Hurley et al., Trans.). New York: Pantheon Books.
- Foucault, M. (1989). Arkkitehtuuri, tieto, valta. In M. Foucault & P. Rabinow, *Kaupunki, tila, valta* (J. Mänty, Trans., pp. 31-52). Tampere, Finland: Tampereen teknillinen korkeakoulu, Yhdyskuntasuunnittelun laitos
- Foucault, M. (1993). *Diskursens ordning* [The order of discourse] (M. Rosengren, Trans.). Stockholm, Sweden: Symposium.
- Foucault, M. (1994). *The birth of the clinic: An archaeology of medical perception*. New York: Vintage Books.
- Foucault, M. (1997a). Candidacy presentation: Collège de France, 1969. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 5-10). New York: The New Press.
- Foucault, M. (1997b). On the genealogy of ethics: An overview of work in progress. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 253-280). New York: The New Press.
- Foucault, M. (1997c). Polemics, politics and problematization. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 111-119). New York: The New Press.
- Foucault, M. (1997d). Self writing. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 207-222). New York: The New Press.
- Foucault, M. (1997e). Technologies of the self. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 223-251). New York: The New Press.

- Foucault, M. (1997f). The ethics of the concern for self as a practice of freedom. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 281-301). New York: The New Press.
- Foucault, M. (1997g). The hermeneutic of the subject. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 93-106). New York: The New Press.
- Foucault, M. (1997h). What is Enlightenment? In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984: Vol. 1. Ethics: Subjectivity and truth* (R. Hurley et al., Trans., pp. 303-319). New York: The New Press.
- Foucault, M. (1998a). Different spaces. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 175-185). New York: The New Press.
- Foucault, M. (1998b). Introduction to Rousseau's Dialogues. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 33-51). New York: The New Press.
- Foucault, M. (1998c). Nietzsche, genealogy, history. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 369-391). New York: The New Press.
- Foucault, M. (1998d). On the archeology of the sciences. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 297-333). New York: The New Press.
- Foucault, M. (1998e). On the ways of writing history. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 279-295). New York: The New Press.
- Foucault, M. (1998f). The order of things. In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 261-267). New York: The New Press.
- Foucault, M. (1998g). What is an author? In J. D. Faubion & P. Rabinow (Eds.), *Essential works of Foucault 1954-1984: Vol. 2. Aesthetics, method and epistemology* (R. Hurley et al., Trans., pp. 205-222). New York: The New Press.
- Foucault, M. (2000a). Governmentality. In: J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans., pp. 201-222). New York: The New Press.
- Foucault, M. (2000b). Interview with Michel Foucault [conducted by B. Trombadori, 1978]. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans., pp. 239-297). New York: The New Press.
- Foucault, M. (2000c). "Omnes et singulatim": Toward a critique of political reason. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans., pp. 298-325). New York: The New Press.
- Foucault, M. (2000d). Questions of method. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans., pp. 223-238). New York: The New Press.
- Foucault, M. (2000e). The birth of social medicine. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (R. Hurley et al., Trans., pp. 134-156). New York: The New York Press.
- Foucault, M. (2000f). The politics of health in the eighteenth century. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (Hurley et al., Trans., pp. 90-105). New York: The New York Press.
- Foucault, M. (2000g). The subject and power. In: J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans., pp. 326-348). New York: The New Press.
- Foucault, M. (2000h). Truth and juridical forms. In J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (R. Hurley et al., Trans., pp. 1-89). New York: The New York Press.

- Foucault, M. (2000i). Truth and power. In: J. D. Faubion (Ed.), *Essential works of Foucault 1954-1984: Vol. 3. Power* (L. Hurley et al., Trans, pp. 111-133). New York: The New Press.
- Foucault, M. (2001). *Fearless speech* (J. Pearson, Ed.). Los Angeles: Semiotext(e).
- Foucault, M. (2003). *Foucault/Nietzsche* (T-K. Lehtonen & J. Vähämäki, Trans.). Helsinki, Finland: Tutkijaliitto.
- Foucault, M. (2005). *The hermeneutics of the subject: Lectures at the Collège de France 1981-1982* (G. Burshell, Trans.). New York: Picador.
- Foucault, M. (2006). *The archaeology of knowledge* (A. M. S. Smith, Trans., 4th reprint). London: Routledge. (Original work published 1969)
- Fraser, N. & Honneth, A. (2003). *Redistribution and recognition*. London: Verso.
- Fry, T. (1994). *Remarkings: Ecology/design/philosophy*. Sydney, Australia: Envirobook.
- Frängsmyr, T. (2004). *Svensk idéhistoria: Bildning och vetenskap under tusen år* (Vol. 1: 1000-1809) [Swedish history of ideas: Bildung and science during thousand years]. Stockholm, Sweden: Natur och Kultur.
- Fox, W. (2003). Deep ecology: A new philosophy of our time? In A. Light & H. Rolston (Eds.). *Environmental ethics: An anthology* (pp. 252-261). Maiden, Ma: Blackwell.
- Gandhi, M. (1938). *Hind Swaraj or Indian Home Rule*. Ahmedabad, India: Navajivan Trust.
- Gay, P. (1966). Age of Enlightenment. In series *Great age of man: A history of the world's cultures: Vol. 8*. Amsterdam, Netherlands: Time-Life International.
- Gay, P. (1987). Introduction. In J-J. Rousseau, *The basic political writings* (pp. vii-xvii.). Indianapolis, IN: Hackett.
- Gendler, T. S. (2000). *Thought experiments: On the powers and limits of imaginary cases*. London: Routledge.
- Gendler, T. S. (2002). Thought experiments. In L. Nadel (Ed. in chief), *Encyclopedia of cognitive science: Vol 4. Similarity - zombies* (pp. 388-394). London: Nature.
- Geras, N. (1999). *Enlightenment and Modernity*. New York: Palgrave Publishers.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Cambridge, GBR: Polity Press.
- González-Gaudiano, E. J. (2006). Environmental education: A field in tension or in transition? *Environmental Education Research*, 12(3-4), 291-300.
- Goody, J. (2006). *The theft of the history*. Cambridge, GBR: Cambridge University Press.
- Gough, A. (2004). The contribution of ecofeminist perspectives. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 149-161). Dordrecht, Netherlands: Higher Academic.
- Gutek, G. (2001). *Historical and philosophical foundations of education: A biographical introduction* (3d ed.). Upper Saddle River, NJ: Merrill.
- Gutting, G. (2005). *Foucault: A very short story*. Oxford, GBR: Oxford University Press.
- Habermas, J. (1995). *Kommunikativt handlande: Texter om språk, rationalitet och samhälle* [Communicative action: Texts on language, rationality and society] (J.A. Molander, Ed., 2nd ed., M. Carleheden, Trans., pp. 399-426). Göteborg, Sweden: Daidalos.
- Halstead, J. M. (2005). Liberal values and liberal education. In W. Carr (Ed.), *The RoutledgeFalmer Reader of philosophy of education* (pp. 111-123). London: Routledge.
- Harper, D. (2001-2010). *Online etymology dictionary*. (2001-2010). Retrieved October 12, 2010, from <http://www.etymonline.com/index.php?term=environs>
- Harrison, P. (2005). "Fill the earth and subdue it": Biblical warrants for colonization in seventeenth century England. Retrieved October 12, 2010, from http://epublications.bond.edu.au/hss_pubs/54
- Harrison, P. (2006). The Bible and the emergence of modern science. *Science and Christian belief*, 18(2), 115-132.

- Hayman, A. P. (2003). The wisdom of Solomon. In Dunn, J. G. & J. W. Rogerson (Eds.), *Eerdmans commentary on the Bible* (pp. 763-778). Cambridge, GBR: William B. Eerdmans.
- Heidegger, M. (1996). *Being and time* (J. Stambaugh, Trans.). State University of New York Press. (Original work published 1927)
- Henry, J. (2002). *Scientific revolution and the origins of modern science*. New York: Palgrave Macmillan.
- Heimlich, J. E. & Ardoyn, N. M. (2008). Understanding behavior to understand behavior change: A literature review. *Environmental Educational Research*, 14(3), 215-237.
- Hesselink, F., van Kempen, P. P. & Wals, A. (Eds.). (2000). *ESDebate: International debate on education for sustainable development*. Gland, Switzerland: IUCN.
- Heywood, C. (2001). *History of childhood: Children and childhood in the West from Medieval to Modern times*. Cambridge, GBR: Polity Press.
- Heywood, C. (2007). *Growing up in France: From the Ancient Régime to the Third Republic*. Cambridge, GBR: Cambridge University Press.
- Hicks, S. R. C. (2004). *Explaining postmodernism: Skepticism and socialism from Rousseau to Foucault*. Phoenix, AZ: Scholargy.
- Hobbes, T. (1998). *Leviathan*. Oxford, GBR: Oxford University Press. (Original work published 1651)
- Holland, A. (2001). Sustainability. In D. Jamieson (Ed.), *A companion to environmental philosophy* (pp. 390-401). Oxford, GBR: Blackwell.
- Holm, N. G. (2003). *Religionshistoria: En introduktion med textläsning* [History of religion: An introduction with text reading] (3d ed). Åbo, Finland: Åbo Akademi.
- Honneth, A. (2003). *Erkännande: Praktiskt-filosofiska studier* (C-G Heidegren, Trans.) [Recognition: Practical philosophical studies]. Göteborg, Sweden: Daidalos.
- Hopkins, C. & McKeown, R. (2002). Education for sustainable development: An international perspective. In D. Tilbury, R.B. Stevenson, J. Fien & D. Schreuder, *Education and sustainability: Responding to the global challenge* (pp. 13-24). Gland, Switzerland: IUCN.
- Horkheimer, M. (1972). *Critical theory: Selected essays*. New York: Continuum. (Original work published 1939)
- Horkheimer, M. & Adorno, T. (1972). *Dialectic of enlightenment* (J. Cumming, Trans.) New York: Herder and Herder. (Original work published 1944)
- Hulme, P. (1990). The spontaneous hand of nature: Savagery, colonialism, and the Enlightenment. In P. Hulme & L. Jordanova (Eds.), *The Enlightenment and its shadows* (pp.16-34). London: Routledge.
- Hume, D. (1990). *Dialogues concerning natural religion*. London: Penguin Classics. (Original work published 1779)
- Hungerford, H. R., Peyton, R. B. & Vilke, B. J. (1980). Goals for curriculum development in environmental education. *Journal of environmental education*, 11(2), 42-47.
- Hungerford, H. R. & Volk, T. L. (1990). Changing learner behaviour through environmental education. *Journal of Environmental Education*, 21(3), 8-21.
- Huxley, R. (2003). Challenging the dogma: Classifying and describing the natural world. In K. Sloan & A. Burnett, *Enlightenment: Discovering the world in the eighteenth century* (pp. 70-79). London: The British Museum Press.
- Håkansson, H. (2005). Profeten Tycho Brahe: Astrologi och apokalyps i 1500-talets naturvetenskap [The prophet Tycho Brahe: Astrology and apocalypse in 16th century science]. *Historisk tidskrift*, 4, 683-709.
- Häggqvist, S. 1996. *Thought experiments in philosophy*. Stockholm, Sweden: Almqvist & Wiksell International.
- Iannone, A. P. (2001). *Dictionary of world philosophy*. London: Routledge.
- Ingimundarsson, E. V. (1997). Bæredygtig udvikling [Sustainable development]. In M. Sørensen, F. Arler & M. Ishøy, *Miljø og etik* (pp. 255-262). Århus, Denmark: NSI Press.

- Irvine, W. B. (2006). *On desire: Why we want what we want*. New York: Oxford University Press.
- Jickling, B. (1991). Environmental education, problem solving, and some humility please. *Trumpeter*, 8(3), 153-155.
- Jickling, B. (2001). Environmental thought, the language of sustainability, and digital watches. *Environmental Education Research*, 7(2), 167-180.
- Jickling, B. (2003). Environmental education and environmental advocacy: Revisited. *The Journal of Environmental Education*, 34(2), 20-27.
- Jickling, B. (2009). Environmental education research: To what ends? *Environmental Education Research*, 15(2), 209-216.
- Jickling, B. & Spork, H. (1998). Education for the environment: A critique. *Environmental Education Research*, 4(3), 309-328.
- Jickling B. & Wals, A. E. J. (2008). Globalization and environmental education: Looking beyond sustainable development. *Journal of curriculum studies*, 40(1), 1-21.
- Johnston, I. (1999). *Introduction to Rousseau's Emile*. Retrieved October 12, 2010, from <http://records.viu.ca/~johnstoi/introser/rousseau.htm>
- Kalela, J. (2000). *Historiantutkimus ja historia* [History research and history]. Helsinki, Finland: Gaudeamus.
- Kant, I. (1784). *An answer to the question: What is enlightenment?* Retrieved October 12, 2010, from <http://philosophy.eserver.org/kant/what-is-enlightenment.txt>
- Kant, I. (1803). *Über pädagogik* [Electronic version]. Königsberg (in former Prussia): Friedrich Nicolovius.
- Kant, I. (1900). *Thoughts on education – Kant on education* (A. Churton, Trans.). Boston: Heath and Co. Retrieved October 12, 2010, from Online Library of Liberty, http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=356&chapter=40990&layout=html&Itemid=27 (Original work published 1803)
- Kant, I. (1996). *The metaphysics of morals* (M. J. Gregor, Trans.). Cambridge, GBR: Cambridge University Press. (Original work published 1797)
- Kant, I. (1997). *Groundwork of the metaphysics of morals* (47th ed.). Cambridge, GBR: Cambridge University Press. (Original work published 1785)
- Kant. (2002). *Critique of practical reason* (W. S. Pluhar, Trans.). Indianapolis: Hackett Publishing. (Original work published 1788)
- Kant, I. (2004). *Kritik av det rena förnuftet* [Critique of pure reason]. Stockholm, Sweden: Bokförlaget Thales. (Original work published 1781)
- Kant, I. (2005). *The perpetual peace* (M. C. Smith, Trans.). New York: Cosimo Classics. (Original work published 1795)
- Kaivola, T. (2000). *GLOBE-ohjelma ympäristökasvatuksen innovaationa Suomessa*. Helsinki, Finland: Helsingin yliopiston opettajankoulutuslaitos.
- Keatinge, M. W. (1992). Introduction. In J. A. Comenius, *Great didactics of Comenius* (pp. 1-169). Whitefish, MT: Kessinger.
- Kelly, C (2001). Introduction. In P. Riley (Ed.), *The Cambridge companion of Rousseau* (pp. 8-56). Cambridge, GBR: Cambridge University Press.
- Kelly, C. (2009). Introduction. In C. Kelly (Vol. Ed.), *Collected writings of Rousseau: Vol. 13. Émile or on Education* (pp. xv-xxxi). Hanover, NH: Dartmouth College Press.
- Kelly, C. & Cook, A. (2000). Introduction. In C. Kelly (Vol. Ed.), *The collected wrings of Rousseau: Vol. 8. The reveries of the solitary walker, botanical writings, and letter to Franquières* (pp. ix-xxviii). Hanover, NH: University Press of New England.
- Kelly, C. & Masters, R. D. (1990). Introduction. In C. Kelly, R. D. Master & P. G. Stillman (Eds.), *The collected writings of Rousseau: Vol. 1. Judge on Jean-Jacques: Dialogues* (pp. xiii-xxxi). Hanover, NH: University Press of New England.

- Kelly, C., Masters, R. D. & Stillman, P. G. (1995). Introduction. In C. Kelly (Ed.), *The collected writings of Rousseau: Vol. 5. The confessions and correspondence, including the letters to Malesherbes* (pp. xvii-xxxvi). Hannover, NH: University Press of New England.
- Kemp, P. (2005). *Världsmédborgaren: Politisk och pedagogisk filosofi för det 21 århundradet* [The Cosmopolitan: Political and educational philosophy for the 21th century]. (J. Retzlaff, Trans.). Göteborg, Sweden: Daidalos.
- Kendall, G. & Wickham, G. (1999). *Using Foucault's methods*. London: Sage Publications.
- Kevany, D. (2007). Building the requisite capacity for stewardship and sustainable development. *International Journal of Sustainability in Higher Education*, 8(2), 107-122.
- King James Bible. (1997). Retrieved October 12, 2010 from <http://etext.virginia.edu/kjv.browse.html>
- Kivelä, A. (2004). *Subjektifilosofiasta pedagogisen toiminnan teoriaan* [From philosophy of the subject to theory of the pedagogical action]. Oulu, Finland: Oulu University Press.
- Klafki, W. (1997a). Education for Europe as seen from the international perspective: Key problems as a central point for future-oriented work in education. In M. Uljens (Ed.), *European identity in change: The meeting between German, Russian and Nordic educational traditions* (pp. 172-185). Vasa, Finland: Åbo Akademi.
- Klafki, W. (1997b). Kritisk-konstruktiv didaktik [Critical constructive didactics]. In M. Uljens (Ed.), *Didaktik* (pp. 215-228). Lund, Sweden: Studentlitteratur.
- Klafki, W. (1998). *Erziehung – Humanität – Demokratie: Erziehungswissenschaft und Schule an der Wende zum 21. Jahrhundert*. Neun Vorträge [Education – humanity – democracy: Educational theory and school at the 21. Millennium shift. Nine lectures]. Retrieved October 12, 2010 from <http://archiv.ub.uni-marburg.de/sonst/1998/0003/welcome.html>
- Klein, H. S. (1998). Middle passage. In S. Drescher & S. L. Engerman (Eds.), *A historical guide to slavery* (pp. 284-279). New York: Oxford University Press.
- Kollmuss, A. & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental education research*, 8(3), 239-251.
- Koskinen, S. (2010). *Lapset ja nuoret ympäristökansalaisina: Ympäristökasvatuksen näkökulma osallistumiseen* [Children and young people as environmental citizens: Participation from an environmental educational view]. Helsinki, Finland: Nuorisotutkimusseura.
- Koskinen, S. & Paloniemi, R. (2009). Social learning processes of environmental policy. In J. Meijer & A. der Berg (Eds.), *Handbook of environmental policy* (pp. 293-308). New York: Nova Science.
- Kroksmark, T. (1989). *Didaktiska strövtåg: Didaktiska idéer från Comenius till fenomenografisk didaktik* [Didactical wanders: Didactical ideas from Comenius to phenomenological didactics]. Göteborg, Sweden: Daidalos.
- Kroksmark, T. (2003). Jean-Jacques Rousseau. In T. Kroksmark (Ed.), *Den tidlösa pedagogiken* (pp. 151-162). Lund, Sweden: Studentlitteratur.
- Krook, H. (1979). *Inledning* [Introduction to letters to Mme Madeleine-Catherine Delessert]. In J.-J. Rousseau, *Brev om blommorna till ma chère cousine* (pp. 7-20). Stockholm, Sweden: Natur och Kultur.
- Kuhn, T. S. (1962). *The Structure of Scientific Revolution* (pp. 239-251). Chicago: University of Chicago Press.
- Käpylä, M. (1995). Ympäristökasvatus koulun oppimis- ja tiedonkäsityksen muuttamisen välineenä. [Environmental education as a tool to change the conception of learning and knowledge]. In S. Ojanen & H. Rikkinen (Eds), *Opettaja ympäristökasvattajana* (pp. 24-39). Helsinki, Finland: WSOY.
- Lai, K. L. (2001). Classical China. In D. Jamieson (Ed.), *A companion to environmental philosophy* (pp. 21-51). Oxford, GBR: Blackwell.

- Lange, L. (2002). Rousseau and modern feminism. In L. Lange (Ed.), *Feminist interpretations of Jean-Jacques Rousseau* (pp. 24-41). University Park, PA: The Pennsylvania State University.
- Lange, E. & Chubb, A. (2009, December). Critical environmental adult education in Canada: Student environmental activism. *New Directions for Adult & Continuing Education*, 124, 61-72.
- Lanson, G. (2006). The unity of Jean-Jacques Rousseau's thought (D. R. Brunstetter, Trans). In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 1. Paradoxes and interpretation* (pp. 11-28). London: Routledge. (L'Unité de la pensée de Jean-Jacques Rousseau, reprinted from *Annales de la Société Jean-Jacques*, 8, 1912, pp. 1-31)
- Leal Filho, W. (1996). On overview of current trends in European environmental education. *The Journal of Environmental Education*, 28(1), 5-10.
- Le Page, M. (2009, September). Consume sceptically. *New Scientist*, 2726, 34-34.
- Lévi-Strauss, C. (2006). Jean-Jacques Rousseau, founder of the sciences of man. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 1. Paradoxes and interpretations* (pp. 198-206). London: Routledge. (Reprinted from *Structural anthropology*, pp. 33-43, by Lévi-Strauss, 1973, London: Penguin Books)
- Liedman, S-E. (1997). *I skuggan av framtiden: Modernitetens idéhistoria* [In the shadow of the future: The modern history of ideas]. Stockholm, Sweden: Bonnier Alba.
- Linné, C. von (1978a). Oeconomia naturae: Naturens hushållning [Nature's economics]. In C. von Linné, *Om jämvikten i naturen* (A. Piltz, Trans., pp. 78-131). Stockholm, Sweden: Carmina. (Original work published 1749)
- Linné, C. von (1978b). Politia naturae: Naturens styrelseskick [Nature's management]. In von Linné, C, *Om jämvikten i naturen* (A. Piltz, Trans., pp. 132-176). Stockholm, Sweden: Carmina. (Original work published 1760)
- Linné, C. von (1991a). Den gyllene åldern [The Golden Age]. In G. Broberg (Ed.), *Gyllene äpplen: Svensk idéhistorisk läsebok* (pp. 701-703). Stockholm, Sweden: Atlantis. (Original work published 1737)
- Linné, C. von (1991b). Menniskans cousiner [Humans' cousins]. In G. Broberg (Ed.), *Gyllene äpplen: Svensk idéhistorisk läsebok* (pp. 472-476). Stockholm, Sweden: Atlantis. (Original work published 1760)
- Locke, J. (1989). *Some thoughts concerning education*. Oxford, GBR: Oxford University Press. (Original work published 1693)
- Locke, J. (1997). *The second treatise of government* (T. P. Peardon, Ed.). NJ: Prentice Hall. (Original work published 1690)
- Locke, J. (2001). *An essay concerning human understanding*. Kitchener, Canada: Batoche Books. (Original work published 1693)
- Losonsky, M. (2001). *Enlightenment and action from Descartes to Kant: Passionate thought*. Cambridge, GBR: Cambridge University Press.
- Lotz-Sisitka, H. (2009). Why ontology matters to reviewing environmental education research. *Environmental Education Research*, 15(2), 165-175.
- Lovejoy, O. & Boas, G. (1935). *Primitivism and related ideas in Antiquity*. Baltimore, MD: The Johns Hopkins Press.
- Løvlie, L. (2008). Har det pædagogiske paradoks nogen betydning i uddannelse? [Does the educational paradox have any impact in education?] In L. Knudsen & M. Andersson (Eds.), *Skab dig! Pædagogisk filosofi* (pp.13-30). København, Denmark: Unge Pædagoger.
- Lundegård, I. & Wickman, P-O. (2007). Conflicts of interest: An indispensable element of education for sustainable development. *Environmental Education research*, 13(1), 1-15.
- Liotard, J.-F. (1979). *The postmodern condition: A report on knowledge*. Manchester, GBR: Manchester University Press.
- Lübcke, P. (1988). (Ed.). *Filosoflexikonet* [Dictionary of philosophy] (J. Hartman, Trans.). Stockholm, Sweden: Forum.

- Lähde, V. (2008). *Rousseau's rhetoric of 'nature': A study on Discourse on inequality* [Electronic version]. Tampere, Finland: University of Tampere.
- Marsh, G-P. (1864). *Man and nature; or, physical geography as modified by human action*. New York: Charles Scribner.
- Masschelein, J. & Ricken, N. (2003). Do we (still) need the concept of Bildung? *Educational Philosophy and Theory*, 35(2), pp. 139-154.
- Mayo, C. (2000). The uses of Foucault. *Educational Theory*, 50(1), 103-116.
- Man, P. de (2006). Theory of metaphor in Rousseau's second discourse. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 110-130). London: Routledge. (Reprinted from *Studies in Romanticism*, 12(2), 1973, 475-498)
- Marks, R. B. (1998). *Tigers, rice, silk and silt: Environment and economy in late Imperial South China*. Cambridge, GBR: Cambridge University Press.
- Marshall, J. D. (1996). *Michel Foucault: Personal autonomy and education*. Dordrecht, Netherlands: Kluwer Academic.
- Matthews, S. (2008). *Theology and science in the thought of Francis Bacon*. Abingdon, GBR: Ashgate.
- May, G. (2002). Rousseau, cultural critic. In J-J. Rousseau, *Social contract and the first and second discourses* (S. Dunn, Trans., pp. 257-265). New Haven, CT: Yale University Press.
- Mayo, C. (2000). The uses of Foucault. *Educational Theory*, 50(1), 103-116.
- McKeown, R. & Hopkins, C. (2003). EE ≠ ESD: Defusing the worry. *Environmental Education Research*, 9(1), 117-128.
- McKnight, S. A. (2006). *Religious foundations of Francis Bacon*. Columbia, MO: University of Missouri Press.
- McMillan, C. (1982). *Women, reason and nature*. Oxford, GBR: Basil Blackwell.
- Merchant, C. (1980). *The death of nature: Women, ecology, and the scientific revolution*. New York: Harper and Row.
- Miranda, B., Castells, M., Oliver, M. F. & Cabral, S. (2004). Quistionnaire results. In B. Miranda, F. Alexandre & M. Ferreira (Eds.), *Sustainable development and intercultural sensitivity: New approaches for a better world* (pp. 89-128). Lisbon, Portugal: Universidade Aberta.
- Mitchell, T. (2000). The stage of modernity. In T. Mitchell (Ed.), *Questions of modernity* (pp. 1-34). Minneapolis, MN: University of Minnesota.
- Molander, B. (1988). *Vetenskapsfilosofi: En bok om vetenskapen och den vetenskapande människan* [Philosophy of science: A book about science and humans occupied with science] (2nd ed.). Stockholm, Sweden: Thales.
- Montaigne, M. de (1986a). Om barnuppfostran [On the education of children]. In M. de Montaigne, *Essayer: Bok 1* (J. Stolpe, Trans., pp. 184-225). Stockholm, Sweden: Atlantis. (Original work published 1592)
- Montaigne, M. de (1986b). Om kannibaler [On cannibals]. In M. de Montaigne, *Essayer: Bok 1* (J. Stolpe, Trans., pp. 254-269). Stockholm, Sweden: Atlantis. (Original work published 1592)
- Montaigne, M. de (1986c). Om pedanteri [On pedantry]. In M. de Montaigne, *Essayer: Bok 1* (J. Stolpe, Trans., pp. 169-183). Stockholm, Sweden: Atlantis. (Original work published 1592)
- More, H. (1987). *The immortality of the soul*. Dordrecht, Netherlands: M. Nijhoff. (The original work published 1659)
- Morley, J. (1891). *Diderot and the Encyclopedists* (2nd ed.). London: McMillan and co.
- Moulder, F. V. (1977). *Japan, China and the modern world economy: Towards a reinterpretation of East Asian development ca. 1600 to ca. 1918*. Cambridge, GBR: Cambridge University Press.
- Munck, T. (2000). *The Enlightenment: A comparative social history 1721-1794*. London: Oxford University Press.
- Mulgan, T. (2001). *The demands of consequentialism*. New York: Oxford University Press.

- Murphy, C. F. jr. (1985). *The search for world order: A study of thoughts and action*. Dordrecht, Netherlands: Martinus Nijhoff.
- Musgrave, P. (1999). *Early modern European economy*. New York: St. Martin's Press.
- Muthu, S. (2003). *Enlightenment against empire*. Princeton, NJ: Princeton University Press.
- Muzzin, L. J. (2005). *Teaching as activism: Equity meets environmentalism*. Montreal, Canada: McGill-Queen's University Press.
- Næss, A. (1981). *Ekologi, samhälle och livsstil* [Ecology, society and lifestyle] (I. Lindblom & V. Sparrman, Trans). Stockholm, Sweden: LT. (Original work published 1973)
- Næss, A. (2002). *Life's philosophy: Reason & feeling in a deeper world* (with P. I. Haukeland, R. Huntford, Trans.). Athens, GA: University of Georgia Press.
- Næss, A. (2003). The deep ecological movement: Some philosophical aspects. In A. Light & H. Rolston (Eds.), *Environmental ethics: An anthology* (pp. 262-274). Maiden, MA: Blackwell.
- Nilsson, R. (2008). *Foucault: En introduktion* [Foucault: An introduction]. Malmö, Sweden: Égalité.
- O'Hagan, T. (2006). Rousseau on amour-propre II: On six facets of amour-propre. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 338-353). London: Routledge. (Reprinted from *Proceedings of the Aristotelian Society*, 73, 1999, 91-107)
- Oettingen, A. (2001). *Det pædagogiske paradox*. Århus: Forlaget Klim.
- Okin, S. M. (1979). *Women in western political thought*. Princeton, NJ: Princeton University Press.
- Okin, S. M. (2006). Rousseau's natural woman. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 131-151). London: Routledge. (Reprinted from *Journal of Politics*, 41(2), 1979, 383-416).
- Oliver M. F. (2004). Implications for teacher education. In B. Miranda, F. Alexandre & M. Ferreira (Eds.), *Sustainable development and intercultural sensitivity: New approaches for a better world* (pp. 151-160). Lisbon, Portugal: Universidade Aberta.
- Olssen, M. (2006). *Michel Foucault: Materialism and education* (Upd. ed.). Boulder, CO: Paradigm.
- Oksala, J. (2002). *Freedom in the philosophy of Michel Foucault*. Helsinki, Finland: Philosophical Studies from the University of Helsinki.
- Oksala, J. (2005). Feministinen filosofia nykyisyyden ontologiana [Feminist philosophy as ontology of the presence]. In J. Oksala & L. Werner (Eds.), *Feministinen filosofia* (pp. 156-173). Helsinki, Finland: Gaudeamus.
- Orr, D. W. (2003). Walking north on a southbound train. *Conservation Biology*, 17(2), 348-351.
- Orr, D. W. (2004). *Earth in mind: On education, environment and the human prospect*. Washington, DC: Island Press.
- Orr, D. W. (2005). Foreword. In A. R. Edwards, *Sustainable revolution: Portrait of a paradigm shift* (pp. xiii-xv). Gabriola Islands, BC: New Society.
- Outram, D. (1995). *The Enlightenment* [Vol 6 in New approaches to European history, W. Beik, T. C. W. Blanning & R. W. Scribner, Series Eds.]. New York: Cambridge University Press.
- O'Donoghue, R. & Lotz-Sisitka, H. (2002). Some insights on the gap. *Environmental Education Research*, 8(3), 261-272.
- O'Sullivan, E. (1999). *Transformative learning: Educational visions for the 21st century*. London: Zed Books.
- O'Sullivan, E. (2004). Sustainability and transformative educational vision. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 163-180). Dordrecht, Netherlands: Higher Academic.
- Palmberg, I. (2000). Miljöfostran i skolan ur finlandssvenskt ämnesläarperspektiv [A Finno-Swedish subject teachers' view of environmental education in schools]. In J. Sjöberg & S-E Hansén, *Kasvatus tulevaisuuteen – Pedagogik för framtiden*. Vasa, Finland: Åbo Akademi, Pedagogiska Fakulteten.

- Palmberg, I. (2003). Miljöpedagogiska modeller [Environmental educational models]. In I. Palmberg, *Teori och praktik i miljöundervisningen* (pp. 41-50). Vasa: Åbo Akademi, Pedagogiska Fakulteten.
- Palmberg, I. (2008). Hållbar utveckling och klimatförändringen i skolan och lärarutbildningen: Pedagogiska implikationer på basen av tidigare forskning [Sustainable development and climate change in school and teacher education: Educational implications based on former research]. In I. Palmberg & E. Jeronen, *Harmoni eller konflikt? Forskning om miljömedvetenhet i skolan och lärarutbildningen* (pp. 61-85). Vasa, Finland: Pedagogiska Fakulteten.
- Palmer, J. A. (1993). Development of concern for the environment and formative experiences of educators. *Journal of Environmental Education*, 24(3), 26-30.
- Palmer, J.A. (1998). *Environmental education in the 21st century: Theory, practice, progress and promise*. London: Routledge.
- Palmer, J. A. (2001). Preface. In J. A. Palmer (Ed.), *Fifty key thinkers of the environment* (pp. xiii-xiv). New York: Routledge.
- Palmer, J. & Neal, P. (1994). *The handbook of environmental education*. London: Routledge.
- Palmer, J., Suggate, J., Bajd, B., Hart, P., Ho, R., Ofwono-Orecho, J. & al. (1998). An overview of significant influences and formative experiences on the development of adults' environmental awareness in nine countries. *Environmental Education Research*, 4(4), 445-464.
- Parry, G. (2000). Education can do all. In N. Geras & R. Wokler (Eds), *Enlightenment and Modernity* (pp. 25-49). Basingstoke, GBR: MacMillan.
- Parry, G. (2001). Émile: Learning to be men, women and citizens. In P. Riley (Ed.), *The Cambridge companion to Rousseau* (pp. 247-271). Cambridge, GBR: Cambridge University Press.
- Passmore, J. (1970). *The perfectibility of man*. London: Gerald Duckworth & Co.
- Payot, J. (1909). *The education of the will: The theories and practice of self-culture* (6th ed., S. E. Jelfiffe, Trans.). New York: Funk & Wagnalls.
- Payne, W. H. (2003). Introduction by the translator. In J-J. Rousseau, *Émile or treatise on education* (pp. xvii-xxv). Amherst, NY: Prometheus Books. (Original work published 1892)
- Peters, M. A. & Besley, T. (2007). Introduction: Why Foucault? New directions in educational research. In M. A. Peters & T. Besley (Eds.), *Why Foucault? New directions in educational research* (pp. 1-14). New York: Peter Lang.
- Peltonen, J. (1997). Problems of an ecologically oriented notion of Bildung. In M. Uljens (Ed.), *European identity in change: The meeting between German, Russian and Nordic educational traditions* (pp. 172-185). Vasa, Finland: Åbo Akademi.
- Philp, M. (1985). Michel Foucault. In Q. Skinner (Ed.), *The return of grand theory in the human sciences* (pp. 67-81). Cambridge, GBR: Cambridge University Press.
- Pigozzi, M. J. (2003). UNESCO and the international decade of education for sustainable development (2005-2015). *Connect*, 28(1-2), 1-7.
- Piltz, A. (1991). *Mellan ängel och best: Människans värdighet och gåta i europeisk tradition* [Between angel and beast: Human dignity and puzzle in European tradition]. Stockholm, Sweden: Alfabeta.
- Pittman, J. (2004). Living sustainably through higher education: A whole systems design approach to organizational change. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 199-212). Dordrecht, Netherlands: Higher Academic.
- Plamenatz, J. (1969). *Man and society: A critical examination of some important social and political theories from Machiavelli to Marx: Vol I*. London: Longmans.
- Plant, R. (1995). *Modernt politiskt tänkande* [Modern political thinking]. Göteborg, Sweden: Daidalos.
- Plato. (1992). *Republic* (G. M. A. Grube, Trans.). Indianapolis, IN: Hackett.
- Platon. (2000). *Skrifter: Bok I [Phaedo, etc.]* (J. Stolpe, Trans.). Stockholm, Sweden: Atlantis.

- Platon. (2001). *Skrifter: Bok 2 [Meno, Phaedrus, etc.]* (J. Stolpe, Trans.). Stockholm, Sweden: Atlantis.
- Platon. (2003). *Skrifter: Bok 3 [Republic]*. (J. Stolpe, Trans.) Stockholm, Sweden: Atlantis.
- Platon. (2006). *Skrifter: Bok 4 [Timaeus, Statesman, etc.]* (J. Stolpe, Trans.). Stockholm, Sweden: Atlantis.
- Platon. (2008). *Skrifter: Bok 5 [Laws, etc.]*. (J. Stolpe, Trans.) Stockholm, Sweden: Atlantis.
- Platon. (2009). *Skrifter: Bok 6 [Alchibiades, etc.]* (J. Stolpe, Trans.) Stockholm, Sweden: Atlantis.
- Plotkin, H.C. (1994). *Darwin machines and the nature of knowledge*. Cambridge, MA: Harvard University press.
- Plumwood, V. (1994). The ecopolitics debate and the politics of nature. In K. J. Warren (Ed.), *Ecological feminism* (pp. 64-87). London: Routledge.
- Plutarchos. (2007). Om att äta kött [On eating meat] (S-T Teodorsson, Trans.). In Plutarchos, *Djurens rätt och vegetarism: Fyra skrifter ur Moralia* (pp. 127-147). Sävedalen, Sweden: Paul Åströms.
- Pojman, L. P. (2009). Strength and weaknesses of utilitarianism. In S. M. Cahn (Ed.), *Exploring ethics: An introductory anthology*. New York: Oxford University Press.
- Rabinow, P. (1997). Introduction: The history of systems of thoughts. In P. Rabinow (Ed.), *Ethics, subjectivity and thruth: Essential works of Foucault 1954-1984: Vol. 1* (R. Hurley et al., Trans., pp. XI-XLII). New York: The New Press.
- Rabinow, P. & Rose, N. (2003). Introduction: Foucault today. In P. Rabinow & N. Rose (Eds.), *The essential Foucault: Selections from the essential works of Foucault 1954-1984* (pp. vii-xxxv). New York: New Press.
- Ramsey, J. & Hungerford, H. R. (2002). Perspectives on environmental education in the United States. In T. Dietz & P. C. Stern (Eds.), *New tools for environmental protection: Education, information and voluntary measures* (pp. 147-160). Washington, DC: National Academic Press.
- Ray, J. (1717). *The wisdom of God manifested in the works of the creation* (7th ed.) [Electronic version]. London: R. Harbin, for William Innys. (Original work published 1691)
- Ray, P. H. (1996, Spring). The rise of Integral Culture. *Noetic Sciences Review*, 37, 4-15.
- Ray, P. H. & Anderson, S. (2001). *The Cultural Creatives: How 50 million people are changing the world*. New York: Three Rivers Press.
- Rediker, M. (2007). *The slave ship: A human history*. New York: Viking Penguin.
- Ricken, N. (2006). The power of power: Questions to Michael Foucault. *Educational Philosophy and Theory*, 38(4), 541-560.
- Ringborg, M. (2001). *Platon och hans pedagogik: En tolkning med utgångspunkt från två kontrasterande pedagogiska processer* [Plato and his education: An interpretation based on two contrasting educational processes]. Stockholm, Sweden: HLS.
- Rinne, R., Kivirauma, J., & Lehtinen, E. (2004). *Johdatus kasvatustieteisiin* [Introduction to educational theory]. Helsinki, Finland: WSOY.
- Roach, C. M. (2003). *Mother/Nature: Popular culture and environmental ethics*. Bloomington, IN: Indiana University Press.
- Roberts, J. M. (2007). *The new Penguin history of the world* (5th ed., O. A. Westad, Upd. & Rev.). London: Penguin Books.
- Robertson, A. (1994). Toward *constructivist* research in environmental education. *Journal of environmental education*, 25(2), 21-31.
- Robottom, I. & Hart, P. (1993). *Research in environmental education*. Victoria, Australia: Deakin University.
- Rorty, R. (1986). Foucault on epistemology. In D. Couzens Hoy (Ed.), *Foucault: A critical reader* (pp. 41-50). Oxford, GBR: Basil Blackwell.
- Sala-Molins (2006). *Dark side of the light: Slavery and the French Enlightenment* (J. Conteh-Morgan, Trans.). Minneapolis, MN: University of Minnesota Press.

- Salkever, S. G. (2006). Interpreting Rousseau's paradoxes. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 1. Paradoxes and interpretations* (pp. 272-290). London: Routledge. (Reprinted from *Eighteenth century studies*, 11(2), 1977-1978, 204-226)
- Sargent, F. (1968). Academia faces the ecological crisis. *International Journal of Biometeorology* [Electronic version], 12(1), 1-2.
- Saul, D. (2000). Expanding environmental education: Thinking critically, thinking culturally. *Journal of Environmental Education*, 31(2), 5-8.
- Sauvé, L. (1999, Summer). Environmental education: Between modernity and postmodernity: Searching for an integrating educational framework. *Canadian Journal of Environmental Education*, 4, 9-36.
- Sauvé, L. (2002). Environmental education: Possibilities and constraints. *Connect*, 21(1-2), 1-4.
- Schaffar, B. (2008). Den tilsyneladende balance mellem frihed og tvang [The obvious balance between freedom and force]. In L. Knudsen & M. Andersson (Eds.), *Skab dig!* (pp. 31-50). København, Denmark: Unge pædagoger.
- Schmidt, J. (2006). Enlightenment. In D. M. Borchert (Ed.), *Encyclopedia of philosophy* (2nd ed., Vol. 3, pp. 242-248). Detroit, MI: Thomson Gale.
- Schnack, K. (1998). Why focus on conflicting interest in environmental education? In M. Åhlberg & W. Leal Filho, *Environmental education for sustainability: Good environment, good life*. Frankfurt am Main, Germany: Peter Lang.
- Schor, J. B. (2004). *Born to buy*. New York: Scribner.
- Schultz, P. W. (2002). Inclusion with nature. In P. Schmuck & W. P. Schultz (Eds.), *Psychology of sustainable development* (pp. 61-78). Norwell, MA: Kluwer Academic.
- Scott, J. T. (2006). The theodicy of the second discourse: The "pure state of nature" and Rousseau's political thought. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 225-256). London: Routledge. (Reprinted from *The American Political Science Review*, 86(3), 1992, 696-711)
- Scott, W. (2009). Environmental education research: 30 years on from Tbilisi. *Environmental Education Research*, 15(2), 155-164.
- Scott, W. & Gough, S. (2003). *Sustainable development and learning: Framing the issues*. London: RoutledgeFalmer.
- Scott, W. & Gough, S. (Eds.). (2004). *Key issues in sustainable development and learning: A critical review*. London: RoutledgeFalmer.
- Scoullios, X. & Malotidi, X. (2004). *Handbook on methods used in environmental education and education for sustainable development*. Athens, Greece: MIO-ECSDE.
- Shapin, S. (1996). *Scientific revolution*. Chicago: University of Chicago Press.
- Sherren, K. (2008). A history of the future of higher education for sustainable development. *Environmental Education Research*, 14(3), 238-256.
- Shklar, J. N. (2006). Rousseau's two models: Sparta and the age of gold. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 1. Paradoxes and interpretations* (pp. 224-245). London: Routledge. (Reprinted from *Political Science Quarterly*, 81(1), 1966, 25-51)
- Short, P. C. (2010). Responsible environmental action: Its role and status in environmental education and environmental quality. *The Journal of Environmental Education*, 41(1), 7-21.
- Siljander, P. (2002). *Systemaattinen johdatus kasvatustieteeseen* [A systematic introduction to educational science]. Helsinki, Finland: Otava.
- Silverman, H. J. (2006). Modernism and postmodernism. In D. M. Borchert (Ed.), *Encyclopedia of philosophy* (2nd ed., Vol. 6, pp. 316-319). Detroit, MI: Thomson Gale. (Original work published 1996)
- Silfverberg, G. (2005). *Ovisshetens etik* [Ethics of uncertainty]. Nora, Sweden: Nya Doxa.

- Simons, M. (2006). Learning as investment: Notes on governmentality and biopolitics. *Educational philosophy and theory*, 38(4), 523-540.
- Simons, M. & Masschelein, J. (2006). The learning society and governmentality: An introduction. *Educational philosophy and theory*, 38(4), 417-430.
- Simons, M., Masschelein, J. & Quaghebeur, K. (2005). The ethos of critical research and the idea of a coming research community. In *Educational Philosophy and Theory*, 37(6), 817-832.
- Singer, P. (2003). *En värld: Globaliseringens etik* [One world: The ethics of globalization] (H. Dalén, Trans.). Stockholm, Sweden: Thales.
- Sjöberg, J. (2002). *Systematisk pedagogik: Ett helhetsperspektiv på teoretiska och läromässiga dimensioner* [Systematic pedagogy: A holistic view of theoretic and learning dimensions]. Turku, Finland: Åbo Akademi University Press.
- Skirbekk, G. & Gilje, N. (1993). *Filosofins historia* [History of philosophy] (S. Andersson, Trans.) Göteborg, Sweden: Daidalos.
- Skirry, J. (2005). *Descartes and the metaphysics of human body*. London: Continuum International.
- Soanes, C. (2003). (Ed.). *The Oxford compact English dictionary* (2nd ed.) Oxford, GBR: Oxford University Press.
- Spinoza, B. (1989). *Etiken* [The ethics] (D. Lagerberg, Trans.). Stockholm, Sweden: Thales. (Original work published 1677)
- Spinoza, B. (1891). Political Treatise. In B. Spinoza. *The chief works of Benedict de Spinoza: Vol. 1* (R. H. Monro Elwes, Trans.). London: George Bell and Sons. (Original work published 1670)
- Sprengel, D. (1917). Noter till nionde boken [Notes to Book Nine in Confessions]. In J. J. Rousseau, *Bekännelser: I oförkortad översättning med upplysande och kompletterande noter samt ett antal porträtt och bilder utgivna av David Sprengel* (Vol. 2, pp. 171-556). Stockholm, Sweden: Bonniers.
- Spring, J. H. (2006). *Wheels in the head: Educational philosophies of authority, freedom and culture from Socrates to human rights* (2nd ed.). Mahwah, NJ: Laurence Erlbaum.
- Staff writers. (2008, November, 14). US space-funeral company plans to launch lunar cemetery. *Moon Daily: The discovery, exploration and application of luna*. Retrieved February 7, 2010. from <http://moondaily.com>
- Stafleu, F. A. (1970). Benjamin Delessert and Antoine Lasègue. *Taxon*, 19(6), 920- 936.
- Starobinski, J. (1988). *Jean-Jacques Rousseau: Transparency and obstruction* (A. Goldhammer, Trans.). Chicago: University of Chicago Press.
- Steingart, G. (2008). *The war for wealth: The true story of globalization, or why the flat world is broken*. New York: McGraw-Hill.
- Sterling, S. R. (2001). *Revisioning learning and change*. Dartington, GBR: Green Books.
- Sterling, S. R. (2004). Higher education, sustainability, and the role of systematic learning. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 49-70). Dordrecht, Netherlands: Higher Academic.
- Stevenson, R. B. (2006). Tensions and transitions in policy discourse: Recontextualizing a decontextualized EE/ESD debate. *Environmental Education Research*, 12(3-4), 277-290.
- Stevenson, R. B. (2007). Contradiction in purpose and practice. *Environmental Education Research*, 13(2), 139-159.
- Stewart, P. (1997). Introduction. In R. D. Masters & C. Kelly, (Eds.), *The collected writings of Rousseau: Vol 6. Julie, or the new Heloise: Letters of two lovers who live in a small town at the foot of the alps* (pp. ix-xxi). Hanover, NH: Dartmouth College.
- Stewart, P. & Vaché, J. (1997). Editors' notes. In R. D. Masters & C. Kelly, (Eds.), *The collected writings of Rousseau: Vol 6. Julie, or the new Heloise: Letters of two lovers who live in a small town at the foot of the alps* (pp. 653-724). Hanover, NH: Dartmouth College.
- Sund, P. & Wickman, P-O. (2008). Teachers' objects of responsibility: Something to care about in education for sustainable development. *Environmental Education Research*, 14(2), 145-163.

- Suutala, M. (1990). *Tier und Mensch im Denken der Deutschen Renaissance* [Animals and humans in the German Renaissance thinking]. Hämeenlinna, Finland: Karisto.
- Suutala, M. (1996). *Naiset ja muut eläimet: Ihmisen suhde luontoon länsimaisessa ajattelussa* [Women and other animals: Human-nature relation in Western thoughts]. Helsinki, Finland: Helsinki University Press.
- Sytnik, K. M., Cherednichenko, L. S., Sakhaev, V. G., Lebedinsky, Yu. P. Voloshin, V. V. & Kolybin, V. A. (1985). *Living in the environment: A sourcebook for environmental education*. Kiev, Ukraine: Naukova Dumka Publishers, UNESCO/UNEP.
- Svendsen, L. F. H. (2004). *Ondskans filosofi* (U.-S. Rask, Trans.) [Philosophy of evilness]. Stockholm, Sweden: Natur och Kultur.
- Swenson, J. (2000). *On Jean-Jacques Rousseau: Considered as one of the first authors of the revolution*. Stanford, CA: Stanford University Press.
- Sörlin, S. (2004). *Världens ordning: Europas idéhistoria 1492-1918* [The order of the world: Europe's history of ideas 1492-1918]. Stockholm, Sweden: Natur och Kultur.
- Sörlin, S. & Fagerstedt, O. (2004). *Linné och hans apostlar* [Linnaeus and his disciples]. Stockholm, Sweden: Natur och Kultur.
- Sörlin, S. & Öckerman, A. (1998). *Jorden en ö: En global miljöhistoria* [The earth an island: A global environmental history]. Stockholm, Sweden: Natur och Kultur.
- Tani, S. (2006). Multiple meanings but limited visions: The concept of the environment in environmental education. In S. Tani (Ed.), *Sustainable Development through Education. International Conference on Environmental Education in Helsinki, Finland, 13th–15th June 2005. Proceedings of the Research Seminar* (pp. 3-13). University of Helsinki, Department of Applied Sciences of Education.
- Tani, S., Cantell, H., Koskinen, S., Nordström, H. & Wolff, L-A. (2007). Kokonaisvaltaisuuden haaste: Näkökulmia ympäristökasvatuksen kulttuuriseen ja sosiaaliseen ulottuvuuteen [The challenge of comprehensiveness: Views of the cultural and social dimensions of environmental education]. *Kasvatus*, 38(3), 199-210.
- Tani, S. & Suomela, L. (2004). Ympäristön kolme ulottuvuutta [The three dimensions of the environment]. In H. Cantell (Ed.), *Ympäristökasvatuksen käsikirja* (pp. 45-56). Helsinki, Finland: PS-Kustannus.
- Taylor, C. (1986). Foucault on freedom and truth. In D. Couzens Hoy (Ed.): *Foucault: A critical reader* (pp. 67-102). Oxford, GBR: Basil Blackwell.
- United Nations (Department of Economic and Social Affairs). (2003). *Johannesburg declaration on sustainable development and plan of implementation of the World Summit on Sustainable Development: The final text of agreements negotiated by governments at the World Summit on Sustainable Development, 26 August-4 September 2002, Johannesburg, South Africa*. New York: United Nations Department of Public Information.
- United Nations. Department of Economic and Social Affairs. (2009). *The millennium development goals report, 2009*. New York: United Nations, Department of Economic and Social Affairs.
- The reader's Bible*. (1951). London: Oxford University Press.
- The Earth Charter initiative: Values and principles for a sustainable future*. (N.d.). Retrieved November 7, 2010, from <http://www.earthcharterinaction.org/content/pages/Read-the-Charter.html>
- Thøgersen, U. (2010). Begær som pædagogisk tema: En læsning af Rousseaus Émile. *Nordic studies in education*, 30(1), 49-62.
- Tilbury, D. (1999). Sustaining curriculum policy and development in environmental education: A European action research project. *European Environment*, 9(35-38), 24-34.
- Tilbury. (2002) Active citizenship: Empowering people as cultural agents through geography. In R. Gerber & M. Williams (Eds.), *Geography, culture and education*. Dordrecht, Netherlands: Kluwer Academic.

- Tilbury, D. (2003). Emerging issues in education for sustainable development. In B. B. Bhandari & O. Abe (Eds.), *Education for sustainable development in Nepal: Views and visions* (pp. 29-40). Hayama, Japan: Institute for Global Environmental Strategies (IGES).
- Tilbury, D. (2004). Environmental education for sustainability: A force for change. In P. B. Corcoran & A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability: Problems, promise, and practice* (pp. 97-112). Dordrecht, Netherlands: Higher Academic.
- Todd, A. M. (2004). Green marketing: Environmental consumer ethics of natural personal care products. *Ethics & The Environment*, 9(2), 87-102.
- Uljens, M. (1998). *Allmän pedagogik* [General education]. Lund, Sweden: Studentlitteratur.
- Uljens, M. (2000). En blick på det 20:e seklets pedagogik [A glance at the education of the 20th century]. In S-E. Hansén, J. Sjöberg & G. Eklund-Myrskog (Eds.), *Att spana i tiden: Pedagogiska utblickar: Festskrift tillägnad Håkan Andersson* (pp. 45-58). Vasa, Finland: Åbo Akademi, Pedagogiska Fakulteten.
- Uljens, M. (2002). The idea of a universal theory of education: An impossible but necessary project. *Journal of Philosophy of Education*, 36(3), 353-375.
- Uljens, M. (2004a). Den pedagogiska paradoxens utmaningar: Element till en teori [The challenge of the educational paradox]. In J. Bengtsson (Ed.), *Utmaningar i pedagogisk filosofi* (pp. 41-68). Lund, Sweden: Studentlitteratur.
- Uljens, M. (2004b). *Pedagogiken som vetenskap i spänningen mellan det moderna och senmoderna* [Education as a science in the tension between the modern and late modern]. Retrieved October 12, 2010, from <http://www.vasa.abo.fi/tal/uljens/installationstal13022004.pdf>
- Uljens, M. (2005). Aikamme kasvatus- ja sivistysteoreettisia haasteita [The contemporary challenges of educational and civilisation theories]. In O. Luukkainen & R. Valli (Eds.), *Kaksitoista teesiä opettajalle*. Jyväskylä, Finland: PS-Kustannus.
- Uljens, M. (2006, November). *Mitä on (suomalainen) kasvatusfilosofia?* [What is (Finnish) philosophy of education]. Paper presented at Kasvatustieteen päivät, University of Oulu. Retrieved October 12, 2010 from <http://www.vasa.abo.fi/users/muljens/pdf/marraskuu.pdf>
- Uljens, M. (2008). Dannelsen og kritikens mulighed [Education and the possibility of critique]. In L. Knudsen & M. Andersson (Eds.), *Skab dig!* (pp. 51-77). København, Denmark: Unge pædagoger.
- UNESCO. (2005). *UNESCO and sustainable development*. Paris: Author.
- United Nations. (2002). *Johannesburg Declaration on Sustainable Development*. Retrieved October 12, 2010 from <http://www.un-documents.net/jburgdec.htm>
- United Nations Conference on Environment and Development (UNCED). (1993). *Agenda 21: Programme of action for sustainable development: Rio declaration on environment and development; Statement of forest principles: The final text of agreements negotiated by governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil*. New York: United Nation.
- Van Den Abbeele, G. (2003). *Travel as metaphor: From Montaigne to Rousseau*. Minneapolis, MN: University of Minnesota Press.
- Vanpée, J. (2006). Rousseau's *Émile* ou de l'éducation: A resistance to reading. In J. T. Scott (Ed.), *Jean-Jacques Rousseau: Critical assessments of leading political philosophers: Vol. 2. Human nature and history* (pp. 207-224.). London: Routledge. (Reprinted from *Yale French studies*, 77, 1990, 156-176)
- Voltaire. (1985). *Filosofi i fickformat* [Philosophy in pocket version] (O. Nordberg, Trans., pp. 39-42). Stockholm, Sweden: Norstedts. (Original work published 1755)
- Voltaire (1991). *Candide* (S. Appelbaum, Ed., Trans. anonymous). New York: Dower. (Original work published 1759)
- Wallgren, T. (1990). Brundtland-kommission korulauseet riisuttuina, *Yhteiskuntasuunnittelu*, 28(1), 6-18.

- Wals, A. (2006). The end of ESD...the beginning of transformative learning: Emphasizing the E in ESD. In M. Cantell (Ed.), *Kestävää kehitystä edistävä koulutus –seminaari 15.2.2006* (pp. 41-59). Helsinki, Finland: Suomen Unesco-toimikunta.
- Wals, A. E. J. , Alblas, A. H. & Margadant-van Arcken, M. (1999). Environmental education for human development. In A. Wals (Ed.), *Environmental education and biodiversity* (pp. 15-33). Wageningen: National Reference Centre for Nature Management.
- Warren, K. J. (1994). Introduction. In K. J. Warren (Ed.), *Ecological feminism* (pp. 1-7). London: Routledge.
- Warren, K. J. (2000). *Ecofeminist philosophy: A western perspective on what it is and why it matters*. Lanham, MD: Rowman & Littlefield Publishers.
- Warren, K. J. & Cheney, J. (1991). Ecological feminism and ecosystem ecology. *Hypatia*, 6(1), 179-197.
- Webster's encyclopaedic unabridged dictionary of the English language*. (1994). New York: Gramercy books.
- Williams, R. R. (1992). *Recognition: Fichte and Hegel on the Other*. Albany, NY: State University of New York Press.
- Willamo, R. (2005). *Kokonaisvaltainen lähestymistapa ympäristönsuojelutieteessä: Sisällön moniulotteisuus ympäristönsuojelijan haasteena* [A holistic approach in environmental sciences: The complexity of the content a challenge for the environmentalist]. Helsinki, Finland: Helsingin Yliopisto, Environmentalica Fennica 23.
- Wilson, A. M. (2006). Encyclopédie. In D. M. Borchert (Ed. in chief), *Encyclopedia of philosophy* (2nd ed., Vol. 3, pp. 221-225.). Detroit, MI: Thomson Gale. (Original work published 1967)
- Wilson, M. D. (1999). *Essays on early modern philosophy*. Princeton, NJ: Princeton University Press.
- Winter, D. D. (2002). (En)gendering sustainable development. In P. Schmuck & W. P. Schultz (Eds.), *Psychology of sustainable development* (pp. 79-95). Norwell, MA: Kluwer Academic Publishers.
- Wittgenstein, L. (2001). *Philosophical investigations* (3d ed., G. E. M. Anscombe, Trans.). London: Blackwell. (Original work published 1953)
- White, L. (1967, March). The historical roots of our environmental crisis. *Science* 155, 1203-1207. Retrieved October 12, 2010 from <http://www.sciencemag.org/cgi/reprint/155/3767/1203.pdf>
- Withers, C. W. J. (2008) *Placing the Enlightenment: Thinking geographically about the age of reason*. Chicago: University of Chicago Press.
- Wolff, L.-A. (2002). *Fortbildning i miljöpedagogik: Ett projektförsök baserat på KOVA-modellen* [Teacher training in environmental education: A project approach based on the KOVA model]. Esbo, Finland: Esbo stads miljönämnd.
- Wolff, L.-A. (2004). Ympäristökasvatus ja kestävä kehitys: 1960-luvulta nykypäivään [Environmental education and sustainable development: From the 1960s to contemporary time]. In H. Cantell (Ed.), *Ympäristökasvatuksen käsikirja* (pp. 16-29). Helsinki, Finland: PS-Kustannus.
- Wolff, L.-A. (2006a). Education for sustainable development needs a critical approach. In S. Tani (Ed.), *Sustainable Development through Education. Proceedings of the International Conference on Environmental Education in Helsinki, Finland, 14th June 2005* (pp. 29-46). Helsinki, Finland: University of Helsinki, Department of Applied Sciences of Education.
- Wolff, L.-A. (2006b). Kestävää kehitystä edistävä kasvatus ja sivistys: Näköaloja korkeakouluopetuksen kehittämiseen [Education and Bildung for sustainable development: A view of the development of higher education]. In T. Kaivola & L. Rohweder (Eds), *Korkeakouluopetus kestäväksi: Opas YK:n kestävästä kehityksestä edistävän koulutuksen vuosikymmentä varten* (pp 37-52). Helsinki, Finland: Finnish Ministry of Education.

- Wolff, L.-A. (2007). The quest for a route to sustainable development in higher education. In T. Kaivola & L. Rohweder (Eds.), *Towards sustainable development in higher education: Reflections* (pp. 58-62). Helsinki, Finland: Finnish Ministry of Education.
- Wolff, L.-A. (2008). Drömmar i pedagogikens kraftfält [Dreams on the educational arena]. In M. Uljens (Ed.), *Det händer i pedagogiken: Röster om bildning i det senmoderna* (pp. 35-64). Vasa, Finland: Åbo Akademi University, Faculty of Education.
- Wollstonecraft, M. (1992). *A Vindication of the Rights of Woman*. New York: Alfred A. Knopf. (Original work published 1792)
- World Commission on Environment and Development. (1987). *Our common future*. Oxford, GBR: Oxford University Press. Nairobi, Kenya: United Nations Environment Programme.
- Wright, G-H. von (1986). *Vetenskapen och förnuftet: Ett försök till en orientering* [Science and reason: An attempt to orientation]. Helsingfors, Finland: Söderströms.
- Wright, G-H. von (1993). *Myten om framsteget: Tankar 1987-1992 med en intellektuell självbiografi* [The myth of progress: Thoughts 1987-1992 with an intellectual self biography]. Helsingfors, Finland: Söderströms.
- Wright, G-H. von (1994). *Att förstå sin samtid: Tanke och förkunnelse och andra försök, 1945-1994* [On understanding one's own time: Thought, speech and other attempts, 1945-1994]. Stockholm, Sweden: Bonniers.
- Yaffe, G. (2003). Indoctrination, coercion and freedom of will. *Philosophy and Phenomenology*, 67(2), 335-356.
- Öhman, J. (2006). *Den etiska tendensen i utbildningen för hållbar utveckling: Meningsskapande i ett genomlevandeperspektiv* [The ethical tendency in education for sustainable development: A practical understanding of meaning-making]. Örebro, Sweden: Örebro universitet.
- Österlund, I. & Wolff, L.-A. (2006, April). The role of recognition in teachers' collaboration. Paper presented at *American Educational Research Association's (AERA) Annual Meeting* in San Francisco.